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THE
CALCUTTA REVIEW.

VOLUME L.



1870.

No man who hath tasted learning but will confess the many ways of profiting by those who, not contented with stale receipts, are able to manage and set forth new positions to the world: and, were they but as the dust and cinders of our feet, so long as in that notion they may yet serve to polish and brighten the armoury of truth, even for that respect they were not utterly to be cast away.—MILTON.

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No. 99.

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The History of India, as told by its own historians. Edited from the posthumous papers of the late Sir H. M. Elliot, K.C.B., East India Company's Bengal Civil Service, by Professor John Dowson, M.R.A.S., Staff College, Sandhurst. Vols. I and II. London. Trübner & Co. 1867 & 1869.

“AND when Sindbad the sailor had finished his story to “Sindbad the landsman, they wondered at it, and he “ordered a hundred miskáls of gold to be given to Sindbad, and “he took it, and went about his business, and he spent the night “wondering greatly.” So writes the unknown author of “The thousand nights and a night”—that most delightful and inexhaustible storehouse of fairy tales; and the majority of his readers have probably never dreamt that the marvellous adventures of Sindbad were one whit more real than those of the genie whom the fisherman found in a box at the bottom of the sea, or those of Camaralzaman and the fair princess Badoura. It must have startled many people to learn a year or two ago, from a book written by a learned French Orientalist, that the travels of the Sindbad of our nurseries were, if not sober truth, yet not further from it than a modern novel, whose local coloring and scenery are taken from the accounts of some book of travels. The days of that wonderful mariner's popularity are, we fear, gone for ever. The charm is broken—the valley of diamonds, and the loadstone mountain, the roc's egg, and the terrible old man of the sea are, alas! all “founded on fact”; and even the mystic legendary shores of the Isle of Rubies are trodden twice a month by a crowd of unimaginative “P. and O.” passengers, and the rubies, real or counterfeit, are hawked for sale

by moormen in the verandah of the Oriental Hotel at Galle. The early Arab merchants were worthy to rank in the same category as Sir John Mandeville the veracious, while, at the same time, they were as accurate observers as Marco Polo. The line of division between what they had *seen*, and what they had only *heard*, is strongly marked. What they had seen was every bay and headland from Cadiz to Ceylon, every port and thriving mart; the systems of Government, the kingdoms and their strength, the populations, with their manufactures and customs, their moral and physical condition, were carefully noted and recorded. What they had heard was that in a certain country there was a bird as big as a mountain, that wept tears of gold and foretold the future; or that in such a city men were buried alive with their wives, and wives with their husbands; that in another the climate was so unhealthy that those who ate after the hour of noon died; that, in short, among the islands of the far East, in Chin and Machin, and other unknown lands, were magicians, afrits, jinns, peris, talking animals, enchanted fruits, and a whole world of strange and supernatural existences. Destitute of that critical instinct which distinguishes the true from the false, bewildered by the novelty of the things which they had actually seen, and thus easily led to believe that there might be things rarer still beyond, these simple, hardy merchant-captains poured into the ears of the untravelled men of letters whom they met on their return, the curious farrago of fact and fiction that has been handed down to posterity by Al Mas'udi, Ibn Haukal, Al Idrisi, and their contemporaries.

In a note to the first edition of the work which stands at the head of this article, the talented and versatile compiler had strung together some extracts from these marvel-mongering Arab geographers, descriptive of India as it was in the days preceding its invasion by the Musalman armies. These extracts have been somewhat injudiciously elevated from the position of a note into the text, and placed at the beginning of the present edition; and an appendix of considerable length is added, which, though intended to throw light on obscure passages in the originals, simply results in imitating the eminent English lawyer, who, in the satirical verses of a contemporary, is said to have

“made that darker

Which was dark enough without.”

The Arabic character, especially as written by the Persians, is, as every Oriental scholar knows, extremely ill adapted to express foreign names, whether of men or places. The diacritical

points which distinguish one letter from another are often omitted, and the greater or less depth of a loop, or length of a stroke, makes a difference of a most material nature. The various readings arising from the indefinite character of the Arabic alphabet have given employment to many European scholars, but the truth can, after all, only be arrived at by one who joins great critical acumen with an intimate knowledge of Indian localities, and their past history. Neither Sir Henry Elliot, nor his editor, Professor Dowson, gives evidence of possessing either of these qualifications in more than a moderate degree, and the latter, having never been in India, is especially deficient in the second of them. The result is that of the nine geographers whose works are represented in the first volume, not one has received that elucidation which might reasonably be expected in the present state of our knowledge. It is perhaps to be regretted that the geographers have been handled at all, especially as they have been placed in the forefront of the undertaking. Sir Henry Elliot's reputation as a scholar would have suffered less, had these confessedly imperfect lucubrations been left where he placed them, in the comparative obscurity of a note or an appendix.

In order to give the reader a general idea of the style of information afforded by these Arab geographers, we may dip here and there into the work of the Merchant Sulaiman before we pass on to the main subject of these volumes—the Musalman invasions of India.

The *Salsilatu-t tawárikh*, or "series of events" of the Merchant Sulaiman, with additions by Abu Zaidu-l Hasan of Síráf, has been before the European public since the year 1718, when it was translated into French by the Abbé Renaudot. At that time no one believed in its genuineness, and the unfortunate Abbé was accused of having written it himself, or at least of having inaccurately translated it. The late illustrious Orientalist Reinaud, whose recent death has been a severe loss to the science of which he was so long an ornament, published, in 1844, the text with a translation and notes such as few but he were capable of writing. It is from this valuable work that the extracts in the present volume are taken. The merchant himself made several voyages to China and India, and his account was written in A.D. 851. Abu Zaid, who attempted to complete his work by making enquiries from travellers and by reading, appears to have finished his edition, as we may call it, some sixty or seventy years later.

We learn from the extracts given by Elliot that the most "eminent of the Princes of India" was the Balhará, "chief of the men who have their ears pierced," and to him all other kings do homage. He is partial to the Arabs, and maintains a large standing army. "He has many horses and elephants, and immense wealth," as becomes a potent Indian Sovereign. Balhará, it is explained, is not the personal name of the King, but a dynastic title, like Cosroes of the Persians. The boundaries of his dominions are not specified. Doctors disagree as to whom the merchant means; but the most probable supposition points to the princes of the Vallabhi or Ballabhi dynasty, who reigned at Ballabhipura, and were known as the Ballabh Ráis. This city was in Kattiwar, and its position near the sea-coast doubtless led the Arab writers to give greater prominence to it than it really deserved; for their knowledge of the interior of this country was decidedly weak as compared with what they knew of the coast.

The next monarch rules at Jurz, reasonably conjectured to be Gurjjara or Guzerat, the more so as his territories are said to form a tongue of land. "There is no country in India more safe from robbers." It is to be feared that in this respect the government of the Guikowar is hardly on a level with that of his predecessor of a thousand years ago. Then comes Tá fak or Tá fan, "which is but a small State. The women are white, and the most beautiful in India." Elliot and his editor are quite at a loss regarding the position of this State, and their conjecture that it was somewhere in the Salt-range is very questionable.

More interesting is the description of the next kingdom, called Ruhmi, whose king "is not held in very high esteem." He is always at war with the Balhará and Jurz, and has more troops than either of them. He takes the field accompanied by fifty thousand elephants, but goes to battle only in winter, because the elephants "cannot endure thirst, and can only go out in the cold season,"—a remark which is commended to the notice of the Commissariat Department, and is one of those little touches of accuracy which we light upon in our Arab authors so frequently. "It is stated that there are from ten to fifteen thousand men in his army, who are employed in fulling and washing clothes. "There is a stuff made in his country which is not to be found elsewhere; so fine and delicate is this material, that a dress made of it may be passed through a signet-ring. It is made of cotton, and we have seen a piece of it. Trade is carried on by

"means of kauris, which are the current money of the country." He also speaks of "the striped *bushán* or *karkaddan*," which is "an animal which has a single horn in the middle of its forehead, and in this horn there is a figure like that of a man." These peculiarities, the allusion to the number of elephants, the love of white clothes, the Dacca muslin, the kauri money, and the rhinoceros make up a tolerably accurate picture of Bengal, though the name Ruhmi is not accounted for, and the position adjoining the territories of the Balhará and Guzerat is evidently a mistake.*

The kingdoms of Kashbín and Kíranj are next mentioned, neither of which are explained by the compiler or his editor; and the extract concludes with some peculiarities of the customs and religions of the various countries. One or two of these are worth notice. Alluding to *sati*, the worthy merchant says:—"Sometimes when the corpse of a king is burnt, his wives cast themselves on the pile, and burn with it; but it is for them to choose whether they will do so or not." On ascetics he has the following:—"In India there are persons who, in accordance with their profession, wander in the woods and mountains, and rarely communicate with the rest of mankind. Sometimes they have nothing to eat but herbs and the fruits of the forest. * * * Some of them go about naked. Others stand naked with the face turned to the sun, having nothing on but a panther's skin. In my travels I saw a man in the position I have described; sixteen years afterwards I returned to that country, and found him in the same posture. What astonished me was that he was not melted by the heat of the sun." Buddhism, as is evident from this and many other sources, had the upper-hand in India in those days. "The principles of the religion of China were derived from India. The Chinese say that the Indians brought buddhas into the country, and that they have been the real masters in matters of religion." There are many other interesting notes of this kind, but our space forbids us to linger over them. We pass on with the remark that, notwithstanding some shortcomings on the part of the editor, the value of these extracts is very great indeed, hardly second to that of the historical portion of the volumes.

From Oman on the eastern coast of Arabia, a voyage of seven

* Perhaps the name Ruhmi, or Rahma as it is elsewhere spelt, may be a corruption of Burmah, which was in those days more extensive than now, and embraced much of Eastern Bengal.

hundred miles as the crow flies brings the traveller to the mouths of the Indus, and the country named from the river, Sindh. The principal inhabitants of this country were Jats and Meds, both undoubtedly tribes of Rajput stock, no matter what General Cunningham may say to the contrary. The prevailing religion appears to have been Buddhism, and there were many wealthy temples and celebrated places of pilgrimage. The whole country, together with the Panjab, and parts of Mekran and Siwistan, was under the rule of one Sovereign, a Brahman by caste, Dáhir, the son of Chach, whose capital was Alor or Ror, the modern Roree in Upper Sind. He appears, however, to have had but a precarious hold over many large districts, especially those bordering on the Great Desert, for we find him just before the Arab invasion moving about his dominions, trying to reduce to order his rebellious chiefs.

As early as the fifteenth year of the Hijra (A.D. 636) the Arab chief Abu-l 'Asi of the tribe of Sakíf, then governor of Oman, made an expedition to Tána, near Bombay, and came back with some plunder. The Khalif 'Umar greeted him on his return with the words "O brother of Sakíf, verily thou hast placed the worm in the wood,"—prophetic words, the meaning of which was well illustrated by the events of the six hundred years that followed. The worm that Abu-l 'Asi had planted knew no rest till it had eaten its way into the very heart of the country. That wide-spread fertile land, indeed, inhabited by a people skilled in arts and manufactures, possessing hoards of gold and jewels, rich fabrics of silk and cotton, spices and fruits, balm and perfumed woods, must have been a strong temptation to the lean and hungry Arabs with their barren soil and scanty crops, and accordingly we find frequent raids occurring during the days of the earlier Khalifs. These invasions were invariably successful, and the Arabs returned laden with booty from the rich cities in the valley of the Lower Indus.

Serious operations on a large scale began when the sanguinary tyrant Hajjáj was governor of Irak. One or two reverses were met with about this time by the Arab forces in Makran and Debal,* and a cargo of slave girls sent as a present to

* Opinions differ as to the locality of this once celebrated place. Some authorities are in favor of Thatta, but others, as appears to us with stronger arguments, support the view that it was near the site of the modern Kurrachee. The arguments *pro* and *con* may be seen in Appendix A., vol. i., p. 374.

Hajjáj by the king of the Isle of Rubies (Ceylon), having been seized by the Meds of Debal, King Dáhir refused to give them up, and defeated two successive generals sent against him. These events seem to have roused the blood-thirsty spirit of one of the worst monsters that history can show, and he at once fitted out a large force for the purpose of conquering the country of Dáhir, and annexing it to the dominions of Islam. The expedition was equipped with an amount of care and forethought very rare in those days. Everything that an army could possibly require, whether on the march or in the battle-field, was supplied, and no less than sixty thousand dirhams of silver were expended. The command was entrusted to a relation of Hajjáj himself, a young and able warrior, Muhammad Bin Kasim, who is stated to have been only seventeen when he entered on his brilliant career of conquest.

Marching by way of Shiraz and Makran, Muhammad Kasim entered Sind, and proceeded to lay siege to Debal, in which place was a *budd* or temple, from which the town probably took its name (Sanskrit. *Deválaya*). The temple was surmounted by a lofty flagstaff with a red flag. The Arabs brought down the flagstaff by a shot from a 'manjanik' or mangonel, called 'the bride', which required five hundred men to work it, and the fall of their flag so disheartened the idolaters that the city was easily carried by assault. The carnage lasted three days. After this all Sind was overrun; Nirún, the modern Haidarabad, obtained peace through the exertions of two Samanis or Buddhist priests, and furnished supplies to the invaders; Siwistán was subdued next, and Muhammad Kasim returning to the Indus attacked, defeated and killed king Dáhir after a battle that raged for five days at the Fort of Rawar. This event occurred "at sunset on Thursday the tenth of Ramazan in the year 93" (June 712 A.D.). Ladi, the wife of Dahir, was taken into the harem of the youthful conqueror, and the monarch's head was sent to Hajjaj at Basra. Jaisiya (Jay Singh), the son and successor of Dahir, took refuge at Brahmanabad. But this strong place also yielded to the arms of the Muslims, and Jaisiya himself escaped with difficulty; thenceforth to lead for some time a wandering life, waging an ineffectual guerilla warfare with his irresistible foe. The royal cities of Alor and Multan fell next, and in both immense quantities of treasure were found. But the people of Sind were soon to be avenged. Shortly after the heavy caravans of plunder had started on their way to Irak, Hajjaj died, and his master, the Khalif Walid, followed him within a few months. The new

Khalif had other favorites, and Muhammad Kasim was recalled (A.D. 714), tortured, and put to death. Several curious stories are told about his fate, the most probable of which is of too purely oriental a character to bear re-production. Al Biládurí assures us, however, that "the people of Hind wept for Muhammad, and preserved his likeness,"—a statement which we may be allowed to receive with more than one grain of doubt.

Thus ended the most brilliant and successful campaign the Arabs had yet made on Indian soil. The practical results were singularly meagre. Beyond the erection of sundry mosques on the sites of desecrated temples, and the capture of a certain amount of slaves and spoil, nothing permanent was effected. In a few years from the recall of Muhammad Kasim, "the Princes of India returned to their States, and Jaisiya, son of Dahir, came back to Brahmanabad." Thenceforward for many years we hear of little more than feeble efforts on the part of successive Arab governors to reduce the country to subjection. In 717 A.D., the Khalif Umar Bin Abdul Aziz wrote letters to the Princes of Sind, inviting them to become Muhammadans, and assuring them of protection and favor. The offer was accepted by many, including Jaisiya himself, and from this date begins the conversion of Sind to the faith of Islam,—a conversion which progressed so surely and rapidly that that country, which from the earliest times appears to have been less deeply imbued with the spirit of the Brahmanical faith than the other provinces of India, became in a few generations as thoroughly Musalman as Arabia itself; and even at the present time the number of Brahmans to be found there is very small, and their position and influence entirely insignificant.*

The campaigns in Sindh led to nothing beyond the province itself; the geographical formation of the country was opposed to the onward march of a conquering army. For many a weary league to the east of Multan and Alor stretched the great desert so aptly called by the Hindus "the region of death." Fierce and warlike, by long habit inured to a life of hardship and peril were the Arab hosts, but fully as fierce, fully as strong to endure heat and thirst, long marches and scanty food were the Chauhan and the Rahtor, the Khichi and the Tuar. No Arab force that had once lost sight of the walls of Brahmanabad, and plunged into the salt and dreary waste, would ever have come back to tell how sharp was the edge of the Rajput's sword, or

* See Dr. Trumpp's article on Sindhi in *Zeitschrift der D. M. G.*, vol. xv, p. 369.

how sinewy the arm that wielded it. Here then the history of the conquest of Sind ceases for the time to interest the general reader ; when we next hear of it, it will be many centuries later, when the onward flowing tide of Islam has gained the throne of Delhi, when the worm is securely planted in the core of the wood, and the lieutenants of a Musalman Monarch march westwards upon the island fort of Bhukkur under the ruins of the royal city of Alor.

The scene now changes to Central Asia, and we are introduced to the turbulent and ever-shifting politics of Khwarizm and Turkistan,—a wider field, over which our guides are few and uncertain, and the clue difficult to find, and still more so to follow. Vast empires are formed and dissolved with a rapidity which amazes us ; mighty conquerors emerge from the seething mass, and, after devastating half a world, die and leave their wide realms to feeble sons, who, in their turn, fall a prey to some newer ‘ scourge of God,’ who founds another ephemeral dynasty upon the ruins of the past.

Subuktigín was brought as a slave to Bokhara during the dynasty of the Samanis, somewhere about the year A.D. 950, and was purchased by Alptigín, the Hájib or Lord Chamberlain of the Court. In the service of this nobleman he remained for some eight or ten years, and was present at the capture by his master of the fortified city of Ghaznin, situated seventy miles to the south of Kabul. Alptigín died, and his son Ishak followed him after a year. Various commotions and dissensions ensued, in which the quondam slave took a leading part, and finally raised himself to the Chieftainship of Ghaznin. “ On the 27th of Shában A.H. 366 (A.D. 977, April), on a Friday, he came out of the fort with the umbrella, jewels and banners, and proceeded to the Jam’a Masjid where he was confirmed in the government and sovereignty of the country.”

During a glorious reign of twenty years he consolidated a kingdom which stretched from Bokhara to the Persian Gulf, and from the Sulaimani range to the frontiers of Persia. He is said to have fought with, and defeated, Jaipal, King of India. It is not clear who this Jaipal was, and even his name is doubtful ; but as the engagements with him took place on the western side of the Indus, it is probable that his kingdom was in the Panjab, or at least not very far from it.

Subuktigín, however, appears to have entertained no desire of invading or conquering any portion of Indian soil ; and in his contest with Jaipal he appears to have acted on the defensive :

and even after the second defeat of the Hindus he contented himself with carrying off booty and elephants. But there was one present at those battles on whom the lesson was not thrown away. Mahmud the son of Subuktigín, young as he was, had not failed to notice with what ease the hardy macemen of Zawulistan* had beaten down the outnumbering hosts of the Indian King. In 996 A.D. he succeeded his father on the throne of Ghaznin, and received from the Khalif a *khil'at* of unusual magnificence and the title of "Right-hand of the State, Guardian of the Faith, and Friend of the Chief of the Faithful." Henceforth he is generally called by historians the Sultan Yamínuddaulat. On receipt of these high honors, Mahmud vowed that he would undertake a *jihád* or war of the faith against Hind every year, a vow which he fulfilled only too faithfully for this unhappy country.

We may reasonably doubt the sincerity of Mahmud's zeal for the cause of Islam, when we look at the position of the kingdom which he inherited. Established within his own lifetime, for he was nearly six years old when his father ascended the throne, composed of provinces pilfered from the neighbouring States, the elements of discord always gnawing at its frontiers, with a capital situated among the rugged passes of the Affghan mountains, among tribes who never have and never will yield a willing obedience to any mortal man, the new kingdom of Ghaznin could not have maintained an independent existence for a year, had not its ruler been gifted with a rare combination of qualities, and supported by a large army of mercenaries. The resources of the country over which Mahmud so long and so successfully ruled were inadequate to the support of a large standing army, and his northern and western neighbours offered no inducements to conquest. But to the east of him there lay stretched out for many and many a mile the fair land of India—rich in everything that could tempt a hungry mountaineer with a lawless horde at his back. The extension of the faith afforded, as it has done so often before and afterwards, a convenient and honorable pretext for the invasion of a peaceful and well-nigh defenceless country,—a means for the continual replenishment of the exchequer, and a cause which enlisted the warmest sympathies of every Muslim.

It is not our purpose to go into the details of the many inroads made by Mahmud into India. The history of his

* The district immediately round Ghaznin, is a hilly tract, with a severe climate, and, now as then, a hardy and resolute population.

conquests is well known, and the volumes we are reviewing add very little to our previous knowledge. Sixteen times during his reign of thirty-six years his forces poured down into the plains of India. In the words of his annalist Minhájju-s-Siráj:—"He converted as many as a thousand idol-temples into "mosques, subdued the cities of Hindustan, and vanquished the "Ráis of that country." His captures of Kanauj, Mathura and Somnath, and the immense wealth in gold and jewels which he carried off, especially from the last-named place, are the most striking instances of his success. Ghaznin became a magnificent capital, adorned with stately buildings of marble; a splendid court, bazaars thronged with the merchandize of distant climes, throngs of nobles, poets and historians, luxury and refinement of every kind, sprung up amid the rude mountain scenery with a rapidity as marvellous as it was unprecedented.

Yet, with all this success, Mahmud made no real conquests in India. Scarcely was his back turned, when the princes whose capitals he had sacked returned to their ruined palaces, and began to build up again whatever the ruthless marauder had thrown down. At the time of Mahmud's death in 1030 A.D. no part of India seems to have been under his sway, if we except the Panjab and Northern Sind. In the reigns of his successors Muhammad and Mas'úd, the former of whom was deposed by his brother after a short reign of seven months, there was, it is true, a Governor of Hindustan, and in the gossiping pages of Baihakí we find mention from time to time of one such Governor being deposed and another sent in his place, but these Viceroys do not appear to have exercised any real sway beyond Lahore, and they were often in rebellion against their master.

The reign of Mas'úd is well known to us from Baihakí's work, which, though prolix, is very amusing. He is well called by Professor Dowson "an Oriental Mr. Pepys." A few extracts from this author will give a lively picture of the Court of the Ghaznivides when at the zenith of its splendour, and will show what manner of men they were who made the first permanent impression on India.

In the following lines we have a touching account of the execution of Amir Hasnak, who had been minister to Mahmud. In that capacity he had offended Mas'úd, who, when he came to the throne, was easily induced by the malignant promptings of a courtier named Khwaja Bu Suhail Zauzani to destroy his former enemy.

“That day and night preparations were made for Hasnak’s public execution. Two men were dressed up as messengers coming from Baghdad, bearing a letter from the Khalif, to the effect that Hasnak the Karmatian should be executed and stoned. * * * *
“When everything was ready, the next morning, on Wednesday, two days before the last of Safar, Amir Mas’úd mounted his horse, intending to go out hunting for three days with his courtiers, attendants and singers. He ordered the Governor of the town to put up a scaffold by the side of the mosque of Balkh, below the city. People repaired to the place. Bu Suhail Zauzani rode to the gibbet, and there stood overlooking it. Horsemen and foot soldiers were sent to bring Hasnak. When he was carried through the ‘Ashikán Bazar, and had reached the centre of the city, Mikail, who was riding, pushed his horse in front of him, called him names and abused him. Hasnak did not look at him, nor give him any reply. But all people cursed him for this disgraceful act, and for the abuse he had uttered. * * * Hasnak was brought to the foot of the scaffold. May God save us from a disgraceful death! The two messengers who were declared to have come from Baghdad were stationed there, and they whose business it was were reading the Kurán. Hasnak was ordered to put off his clothes. He fastened the string of his trousers, and tied up his drawers. He took off his coat and shirt, and threw them away, and there he stood naked with only his turban and trousers on, and his hands clasped together. His body was as white as silver, and his face like hundreds of thousands of pictures. All men were crying with grief. An iron helmet and visor were brought, which had been purposely made small, so that it did not cover his face and head. Men cried aloud for his head and face to be covered, that they might not be battered by the stones, because his head was to be sent to the Khalif at Baghdad. Hasnak was held in this state till a larger helmet was brought and his lips kept moving, repeating something. * * * Every one exclaimed, Are you not ashamed to slay such a man upon the scaffold? A great uproar was just about to commence, when the horsemen moved hastily towards the populace, and repressed the noise. Hasnak was then taken to the gibbet, and placed on that steed on which he had never sat before. The executioner fastened him tight, and the robes hung down. It was proclaimed that he was to be stoned, but nobody touched a stone. All were bitterly crying, particularly the Naishapurians. At last a parcel of vagabonds were hired with money to throw stones; but the man was already

“ dead, for the executioner had cast the rope round his neck, and
“ had suffocated him. This was the end of Hasnak, his life and
“ story. May God be merciful to him ! ”

The accusation of his being a Karmatian alludes to an heretical sect of that name, whose hostility to the orthodox Musalmans gave rise to great disturbances ; they were rigorously proscribed by the Khalifs, but were not suppressed for many years.

The next extract may be called

A little Party at the Palace.

“ After their departure the Amir said to 'Abdu-r Razzák,
“ What say you, shall we drink a little wine ? He replied :—
“ When can we better drink than on a day like this, when
“ my lord is happy, and my lord's son has obtained his wish, and
“ departed with the minister and officers, especially after eating
“ such a dinner as this ? The Amir said, Let us commence
“ without ceremony, for we have come into the country, and we
“ will drink in the Firozi Garden. Accordingly, much wine was
“ brought immediately from the Pavilion into the garden, and
“ fifty goblets and flagons were placed in the middle of a small
“ tent. The goblets were sent round, and the Amir said, Let
“ us keep fair measure, and fill the cups evenly, in order that
“ there may be no unfairness. Each goblet contained half a
“ *man*. They began to get jolly, and the minstrels sang. Bú-l
“ Hasan drank five goblets ; his head was affected at the sixth ; he
“ lost his senses at the seventh, and began to vomit at the eighth,
“ when the servants carried him off. Bú-l 'Alá the physician
“ dropped his head at the fifth cup, and he also was carried off.
“ Khalil Daúd drank ten, Siyábírúz nine ; and both were borne
“ away to the Hill of Dailaman. Bu Na'im drank twelve, and
“ ran off. Dáúd Maimandi fell down drunk, and the singers and
“ buffoons all rolled off tipsy, when the Sultan and Khwaja
“ 'Abdu-r Razzák alone remained. When the Khwaja had drunk
“ eighteen cups, he made his obeisance, and prepared to go,
“ saying to the Amir, If you give your slave any more, he
“ will lose his respect for your Majesty, as well as his own wits.
“ The Amir laughed and gave him leave to go, when he got
“ up and departed in a most respectful manner. After this the
“ Amir went on drinking and enjoying himself. He drank
“ twenty seven goblets full, of half a *man* each. He then arose
“ and called for a basin of water and his praying carpet, washed
“ his face, and read the mid-day prayers, as well as the afternoon
“ ones, and so acquitted himself that you would have said he

"had not drunk a single cup. He then got on an elephant and "returned to the palace. I witnessed the whole of this scene with "my own eyes—I, Abú-l Fazl."

No very great events took place in India during the reign of this hard-drinking monarch. The Governor of Hindustan was Ali Ariyáruk, who was recalled and mysteriously made away with in A.D. 1031. After him Ahmad Niáltigín was appointed, but after some years rebelled, and was slain by Tilak, a Hindu, who was appointed to succeed him but appears to have held the post only a short time, as a few months afterwards Prince Majdud, son of the king, was made Governor, and started for Lahore. Mas'úd himself made several inroads into India, in one of which he took Háusi, which was called "the virgin fort" as it had never before been captured. Niáltigín is also recorded as having on one occasion penetrated as far as Benares, and plundered it. The distracted state of Mas'úd's western dominions, however, and the threatening attitude of the Seljukian Turks on his North-Western frontier prevented him from giving much attention to Indian affairs. Eventually, indeed, he was defeated by these Seljuks after a bloody battle which lasted three days, and the whole of Khurasan thus passed away from his house. Mas'úd fled to Ghaznin, where he collected all his treasures, and retreated towards his Indian dominions. His Turki and Hindi slaves took advantage of his weakness to seize him in the Margalla Pass near Rawul Pindee, and he was shortly afterwards murdered in the year A.D. 1040, and his brother Muhammad, whom he had deposed and kept in prison, was raised to the throne.

After Mas'úd's death the Ghaznvide kingdom fell into that state of internal commotions, palace intrigues, murders and rivalries, which was in those ephemeral Asiatic monarchies the sure precursor of dissolution. The vast territory of Khurasan was lost by Mas'úd's defeat, and in process of time one province after another dropped off, till the last monarch of the race had nothing left to him but the Punjab.

During the hundred and forty years occupied by the gradual decline of the house of Subuktigín, another kingdom had been rising upon its ruins. The Chieftains of the hill territory of Ghor between Ghaznin and Herat, had long been known as warlike and ambitious princes. After the fashion of those times, they were independent whenever circumstances permitted, and they bowed the neck and paid tribute whenever a kingdom too strong for them to resist was established in

their neighbourhood. The rugged and inaccessible hills of Ghor were a safe retreat for their armies, and none but the most powerful of their enemies dared penetrate those dangerous fastnesses. The great Mahmud, however, captured Muhammad Suri, the then Chief of Ghor, after a desperate resistance, but the proud bandit-prince could not brook imprisonment ; he died before he reached Ghaznin of a broken heart.

More than a hundred years afterwards Aláu-d din a prince of the house of Ghor entered Ghaznin as a victor, and for seven days and nights gave it to the flames. The nephew of Aláu-d din, named Ghiyás, it was, who in 1173 A.D. wrested Ghaznin from the hands of the Ghuzz, a tribe of Turks who had held it for twelve years, after they had ousted the last of the Ghaznivides. Ghiyasu-d din placed his younger brother on the throne of Ghaznin and himself returned to Ghor.

This younger brother is, next to Mahmúd, the most celebrated of all the invaders of Hindustan. His name in full is Sultánu-l 'azam Mu'izzu-d-dunya wáu-d dín Abu-l Muzaffar Muhammad bin Sâm ; to the Indians, however, he is better known by the title of Shahábu-d din Ghorî.* He and his brother Ghiyás appear to have held a sort of joint sovereignty over all the lands which once owned the sway of the terrible Mahmúd, except the Panjab and its immediate neighbourhood, in which the last effeminate scion of that once mighty house had found a temporary refuge.

Shahábu-d din, however, was not the sort of man to leave any part of what he considered his dominions in the hands of another. From all that is related of him, he appears to have been very different in character from his precursor or Mahmúd. We see in him none of that ardent zeal before which distances and difficulties vanished, huge hosts were dissipated, and fenced cities fell. The Ghorî prince was simply a tough and obstinate mountaineer, a soldier of fortune, who had passed, young as he was, from a palace to a dungeon, and thence again to a throne ; whom no vicissitudes of fortune could daunt and no defeats dismay. As a king, it was expected of him that he should fight, and conquer, and injure his neighbours to the best of his ability ; and he appears to have acted up to this notion of his kingly duties all through his life, in a calm, determined

* His real name was of course Muhammad bin Sâm,—Mu'izzu-d dunyá and the rest being only his titles ; but he is so universally known as Shahábu-d din, even to Chand, the Hindu bard, that we have preferred using this name in the narrative.

way, fighting chiefly for the fun of the thing, and always ready and able to collect a fresh army as soon as his last had been cut to pieces. Such a man as this was likely to make a more lasting impression upon any country he conquered than Mahmúd. The latter would come down with all the scathing fury of the hurricane, and in a few months' time would retire, leaving a pillaged, burnt and bleeding country in the hands of its old masters: the former would bring his armies well-equipped and brave, and enjoy six months' hearty good fighting, capturing towns and forts, conquering a fair stretch of country, but taking very good care to keep what he had taken, by leaving his captains and men of war in possession till he came again,—nay more, leaving them little bits of work cut out for them during his absence; as, for instance, when he told Baháuddin Tughril, one of his generals, that he ought to make himself master of Gwalior—a hint which Tughril was only too happy to act upon.

In the third year of his reign Shahábu-d din marched upon Multan, which had long been a Musalman city, and took it from the hands of the heretics of the Karmatian sect, and shortly afterwards he crossed the desert to Nahrwala, where however the Rajputs defeated him, and he had to retreat.

Next year he conquered Peshawur, and two years afterwards advanced on Lahore where the last of the Ghaznivides, Khusru Malik, sent him his son as a hostage, and an elephant as a present. In 1182 he took a run into Sind and returned with great spoil, and in 1184 had another season in the Lahore country where he built the fort of Sialkot. As soon as his back was turned, the ill-advised Khusru, with some Hindustanis and Gakkars, tried, but unsuccessfully, to take the newly-built fort. This brought back the Sultan, who made an end of Khusru Malik by sending him off to his brother Ghiyasud din at Ghor for safe custody, and putting one of his own men, 'Ali Karmákh, Chief of Multan, into Lahore as Commandant.

On the next occasion of his visit to India, which was in 1191, he advanced as far as Sarhind, where there was then a fort, which he took and gave in charge to one Kazi Tolak. At this point in the Muhammadan narrative of Minhájus Siraj, we first hear of the Harold of Indian history, as Shahábu-d din was its William the Bastard—the dauntless, brilliant, but ill-fated Prithiráj—'Rai Kolah Pithaurá' he is here called, and to this day he is well known in India by this loving nick-

name Rai Pithaurá. We know more of this prince than of any other Indian monarch of pre-Muhammadan times, from the poem of his 'vates sacer', his devoted servant and friend, the bard, Chand Bardai, the Chaucer of the Hindus. The account which this old bard gives of his master's life and exploits, and of his constant conflicts with the invader, whom he calls "Sáh Sahábdi", "Khurásán Multan Amír", "Pátisáh (Pádsháh)", and by the hitherto unexplained title "Pakarí Sáh," differ very materially from the relation of the Muhammadan historian, and it is almost impossible to reconcile them. According to Chand, Shahabu-d din was several times captured in battle by Prithiráj and let go on payment of a heavy ransom. Nothing of the kind is mentioned by Minhaj, who wrote fifty years after the event, and might therefore be expected to have no motives for concealing facts, especially as the monarch under whose patronage he flourished was not of the same race or dynasty as the Ghorí Sultán. Be this, however, as it may, even the Muhammadans confess that Rai Pithaura gave Shahábu-d din a severe defeat at Naráin near Karnal, and that the Shah was wounded in the arm, and nearly fell. The Ghorian army was completely routed, and fled in confusion. Next year the Sultan came back with a large army of 120,000 cavalry, and on the same battle-field of Naráin overthrew and completely destroyed the army of Prithiráj. The Hindu King is said to have been captured in his flight at "Sarsuti," and, as the Muslim writer politely puts it, "sent to hell." It is not clear how he could have got to Sarsuti from Naráin without going through the Sultan's army; but the geography is by no means accurate. Indeed, what with omissions of vowel points and various readings on the one hand, and the "*suppressio veri et suggestio falsi*," indulged in by both parties, on the other, we are driven reluctantly to admit that the true story of these memorable events has yet to be discovered. Chand does not profess to be accurate. He is a poet. Gods and demigods, rishis, munis, and supernatural beings generally enter largely into the action. Birds talk, beasts weep. Kings are all brave, and have millions, billions, and trillions of gold in their treasuries. Armies are countless. The sun stands still, and the serpent that supports the earth shakes beneath the tread of innumerable warriors. Prithiraj's doughty deeds are beyond the power of human tongue to express, or pen to describe. All this we can tolerate in a writer whose literary pedigree descends from the authors of the Mahabharata and Ramayana, and who, like them,

scorns the narrow limits that contented the modest genius of a Homer and a Virgil, and rolls forth his exuberant stream of poetry in fifty or a hundred thousand verses. But Chand is coherent enough as to facts. Stripped of its absurd exaggerations, the story he tells is undoubtedly true. He says that Prithiraj ascended the throne of Delhi at the age of sixteen; that he waged gallant and successful wars with Shahábu-d din for a long series of years, occupying himself in the intervals with hunting, and with carrying off his neighbours' daughters; and that he carried on two bloody and suicidal contests, one with the Chandal Raja, Parimal Deo of Mahoba in Bundelkhand, and the other with Jay Chand, King of Kanauj. Doubtless the progress of the invader was rendered easier by the folly of these hot-headed Rajputs, who wasted their strength in intestine broils 'while the foe was at their gates', but Chand sees nothing but the glory of his adored monarch; he has no hyperboles too extravagant for him and his "Súr Sámant Sab," his paladins and peers.

The Musalman annalists, on the contrary, are in many respects meagre and unsatisfactory authorities. They, too, have their exaggerations; but with them it is the bolstered and stilted Persian style that is the cause, not the free exuberant flow of the "wild bard's martial strain." Hasan Nizámi, for instance, after transferring Rai Pithaura from Delhi to Ajmír, thus relates the battle:—"When the Kola (natural son*) of the Rai of Ajmir, "the vaunts of whose courage reached the ears of far and near, "heard of the approach of the auspicious standard and the victorious armies, he advanced for the purpose of fighting, and "having adjusted the robe of slaughter and the arms of battle, "marched on over hills and deserts with a well-equipped army, "the number of which cannot be conceived in the picture-gallery "of the imagination. * * * A hundred thousand grovelling "Hindus swiftly departed to the fire of hell." When the Rai is killed, "the diamond-like sword severed the head of the abandoned wretch from his body." Writers like this, and Hasan is not singular, may be a little more explicit perhaps than the Hindu bard in the matter of dates, but they are so blinded by bigotry and intolerance, and so defective in details, as to be of very little

* Which he certainly was not. Poor Prithiráj!

"The hero, lord of Sambhari,

"The king, Somesar's son"—

to be handed down to posterity as a mere bastard,—he the crown and flower of the bluest blood of the Rajputs!

use for historical purposes. No mention is made of the contests between the Hindu kings, which must have greatly facilitated Shahábu-d din's operations; indeed Chand expressly tells us on one occasion that the news of Prithiraj's having marched out of Delhi to attack a fort in Eastern Bundelkhand, was reported to the Shah "in Ghaznin, where he lay," and that he at once took advantage of the withdrawal of the army from Delhi to march and attack it. Nothing of all this is related by the Muhammadan historians. Perhaps they were unwilling to admit that their monarch's successes were attributable as much to the half contemptuous rashness of the proud Chauhán, as to his own skill and prowess.

It is disappointing, whatever be the cause, to find the heroic Prithiraj, the central figure in a grand national epic, dwindle down in the courtly pages of Minhaj to the accursed infidel who, after inflicting merely a temporary check upon the arms of the invader, fled from the field, and was ignominiously slain. Ruthlessly, too, does this account, laconic as it is, upset the romantic story which represents Prithiráj as a prisoner in the dungeons of Ghaznin, discovered by his devoted follower Chand, who, wandering round the fort, made himself known, Blondel-like, by singing an air which he had made for his Richard in happier days.

But to proceed with the narrative. Shahábu-d din returned home after the battle of Naráin, leaving his celebrated lieutenant Kutbu-d din Aibak in charge. This man, once a slave like Subuktigin, and like him destined to die on a throne, captured Mirat and Delhi during his master's absence. Here again the terrible "Barí larái," which forms so grand and gloomy a climax to Chand's epic, in which Shahábu-d din defeats Prithiráj under the walls of the royal city, and enters Delhi in triumph, is relegated to the domains of myth.

Next year, in 1193, the Ghorí in person entered Hindustan, and, advancing to Kanauj, defeated Prithiráj's old enemy Jay Chand at Chandrawar, or Chandwár in the Doab, and captured over 300 elephants in the battle. After this he left Kutbu-d din in command, and busied himself with affairs west of the Indus. Once again, thirteen years after, he entered the Panjab in winter to punish the ever-turbulent Gakkhars of the Salt Range. It was his last exploit. On his return, at a place called Dhamek, he was surprised by the Gakkhars, his guard cut to pieces, and he himself murdered. Thus ended a reign of thirty-two years in the winter of 1205-6 A.D. He had no sons, and his dynasty as ruler of Ghaznin began and ended with himself.

Henceforth the story is a short and summary one. We have to deal with Kutbu-d din Aibak, the Turkish slave, and real conqueror of India. During the thirteen years of his viceroyalty in this country, he took, one by one, the chief cities of Hindustan. He had reduced Delhi in 1191, and had accompanied his master in his expedition against the Raja of Kanauj in 1193-4. In 1197, he conquered Thankar, and two years later he marched upon Nahrwala, and avenged the Sultan's defeat upon Raja Bhim Deo. He thus, in a series of battles and sieges, firmly established his master's power in the country, and finally, by a fate rarely reserved to generals however successful, was enabled at his master's death to mount the throne himself, and was crowned at Lahore king over those wide realms which he had thought he was winning for another. Shahabu-d din's nephew, Ghiyasu-d din Muhummad, who appears to have succeeded him at Ghor, granted to Kutbu-d din the royal canopy and the title of Sultan over the eastern parts of his dominions, probably feeling that he had no chance of holding them himself, and on Tuesday, the 18th of Zi'lka'da A.H. 602 (A.D. 1206 June,) the first Musalman king of India ascended the throne, to be followed for six hundred and fifty years by princes of the same alien faith.

From this date the word "invasion" ceases to be applicable to the Muhammadan proceedings. Other raids there were later on, such as those of Chingiz Khan, Timúr, Babar, and Nadir Shah; but these, as contests of Musalman with Musalman, have an interest of a very different kind to that which attaches itself to the wars which resulted in the establishment of a foreign and casteless race in the centre of the sacred land of the Brahmans. From the reign of Kutbu-d din onwards whatever wars took place between the Muslim and the Hindu were wars between Indian and Indian. The invaders settled down in the land, and became part and parcel of its population. Persian was heard in the streets as much as the old Prakrit dialects, and the mosque rose by the side of the temple. Large masses of the population were converted to the faith of Islam, including the hardy and turbulent Játs, Gujars, and other pastoral races of the Panjab. Henceforth the title of Sir H. Elliot's work ceases to be a misnomer, as it certainly has been up to this point. How a selection of extracts from annals written by Arab, Persian and Turkish authors relating to the progress of their countrymen in conquering the to them foreign land of India, came to be called "*The History of India as told by its own historians,*"

is a mystery the solution of which perhaps Mr. Edward Thomas may be good enough to supply in the next volume. Whatever be the title of the work, however, and whatever be the failings of the geographical portion of it, there can be no doubt as to the value of the historical portion. The authors are well selected, and the extracts chosen for translation are just those which supply the necessary links in the story, and, with some exceptions here and there, they are fairly translated. In a book composed by so many hands there must necessarily be much inequality of execution, but Professor Dowson's careful revision has done away with a great deal of this. The only serious objection that can be made applies more to the form of the book than to its matter. It may be said that it is too superficial for the scholar, and too heavy for the ordinary reader. The former will not be satisfied with mere translations of detached portions, while the latter will turn away wearied by constant interruptions, tales told twice or thrice over, and a style which lacks the attraction of a continuous narrative. The concluding portions of the second and the promised third volume will give us the story of the consolidation on the throne of Delhi of the power which we have seen struggling into existence,—a power which, though often productive of evil, was still quite as often fruitful of good, which now that it has passed away has left behind it in India many things we could not well do without, and many more which are among the most valuable institutions of the country, and the surest guarantees of its future progress.

ART. II.—*The Malay Archipelago : the Land of the Orang-Utan and the Bird of Paradise.* A Narrative of Travel, with Studies of Man and Nature. By Alfred Russel Wallace. Macmillan & Co. 1869.

MR. WALLACE'S book has been already noticed in our pages, but it is sufficiently replete with new information and suggestion to justify a more extended review, and we propose in the present paper to treat it less as a book of travels than as a store-house of facts and opinions. The Archipelago has been described, in whole or in part, by many travellers ; and the principal islands have formed the subject of valuable historical treatises, such as those of Crawford, Marsden, and Raffles ; but Mr. Wallace has by preference taken up those aspects of his subject which his predecessors have ignored, and it is not too much to say that we have in these volumes the first opportunity of forming an opinion on the natural history, in its broad sense, of the great group of Eastern islands,—including in the term 'natural history' not so much the specific peculiarities of animals and plants as the general aspect of the fauna and flora, its geographical distribution, and the numerous questions of what may be called historical geography, which that distribution suggests and solves. Nor should it be regarded as a drawback to Mr. Wallace's work, that he interprets his facts for the most part with reference to a special theory, which has undoubtedly not as yet been accepted by the scientific world as embodying absolute truth. Mr. Wallace is no blind follower of Darwin ; and although on many points they are singularly in accord, it should be remembered that Mr. Darwin's great preliminary book, in which he sketched out for the first time his views on the origin of species, was published during Mr. Wallace's absence in the East, and that the development of the opinions of the latter, during the journeys which gave rise to the book before us, was strictly independent of Mr. Darwin. Left often for weeks together to the solitude of his own reflections, without a companion, and disabled as he frequently was by illness from active exertions in the prosecution of his special object, that of collecting birds and insects, he naturally betook himself to philosophic reflection on the phenomena which he had observed ; the result was that he arrived by independent research at a set of conclusions for the

most part identical with those of his friend and fellow-thinker at home. This fact could, we believe, be established by reference to the papers which Mr. Wallace sent home at various times during his residence in the Archipelago, and that the world has heard nothing of a quarrel for precedence is due partly to the cordial friendship which unites the two explorers, but more to their common participation in the true scientific spirit, the genuine love of truth, which can hardly exist with jealousy or self-seeking. The simple truth is that Darwinism, right or wrong, is a necessary product of the time we live in ; with our present amount of knowledge, and our present freedom of speculation, it was unavoidable that attempts should be made to solve the complicated problems of nature in some such way. If there had been no Darwin, Mr. Wallace, and perhaps others, would have occupied the vacant place ; and the rapid welcome of the new doctrine by the most philosophical naturalists of the day, old as well as young, sufficiently proves how prepared men's minds were to receive it. Mr. Wallace's book is not an argumentative treatise ; he does not profess to supply us with new arguments in favor of Darwinism ; he only shows, as it were incidentally, that it can be successfully applied to new sets of facts, which indeed is its true test. He assumes some of its main conclusions throughout his book ; but these are the very conclusions which have been almost universally adopted by scientific men, and apart from which, we may safely venture to assert, no philosophical natural history is at all possible. Moreover, he has borne in mind that his book is intended for popular reading, and has nowhere yielded to the temptation of injudicious speculation on the two points on which alone a Darwinian naturalist incurs the danger of annoying the sensibilities of his readers, namely, the relation of the doctrine of development to the belief in a Creative Power, and the relation of man to the anthropoid apes. The latter subject is one which he had ample opportunities to discuss, living as he did among the highest apes and some of the lowest of men, and he deserves at all events the credit of reticence.

We shall first give a general sketch of the conclusions to which Mr. Wallace has been led from his study of the physical geography of the islands and their inhabitants as to the changes which have taken place in the relative distribution of land and water ; and in doing this we shall dwell most upon such of his conclusions as best illustrate his method ; and we shall afterwards pass in review the most interesting of his facts regarding

the natural history of the Archipelago, concluding with an account of the races of men which inhabit it.

The southern boundary of the Archipelago is formed by a well-marked chain or line of islands—Sumatra, Java, Bali, Lombok, Sumbawa, Flores, the small islands between Flores and Timor, and Timor itself, which, however, has its major axis inclined with reference to the continuous line formed by the major axes of the other islands. They are separated by narrow straits, and tied as it were into a single group by a line of volcanoes which runs along their whole length from Sumatra to Timor. The study of the map produces an almost indelible impression on the mind that this series of islands is of common origin, was upheaved at the same time and by the same causes, and was, perhaps, at one period a long bank or isthmus of continuous land, which in later ages was here and there broken by the force of currents. But Mr. Wallace holds that the western portion of the series belongs to Asia, and the eastern to Australia, the division between the two being the fifteen miles of strait which separates the islands of Bali and Lombok, and that there never was a time when this watery barrier did not exist, separating by a sharp line two of the main divisions of the world. To this seemingly arbitrary conclusion he is guided by the marked difference in animal forms which characterises the two halves of the chain. The fauna of Java, to which that of Bali closely approximates, is essentially Asiatic. Its larger quadrupeds—the elephant, the rhinoceros, the tiger and leopard, the wild cattle—all belong to Southern Asia. Its birds are of continental types; many of the species and nearly all the genera are actually common to Java and Continental Asia. In Lombok, on the contrary, there is a new set of species, betraying to the most casual observer a distinct type. Instead of orioles, barbets, fruit-thrushes, and woodpeckers, we have the conspicuous white cockatoos, the *Meliphagidæ* or honey-suckers, and the *Megapodidæ* or brush-turkeys, all well-known Australian types; the large quadrupeds have disappeared, and except the bats or flying quadrupeds, we find only a few straggling species which belong to No-man's-land, and might have been introduced from island to island on ships or on floating wood; while still further east, we discover distinct traces of Australian influence in the existence of Marsupialia, or pouched quadrupeds, a group which has not a single representative on the continent of Asia, or the great islands of Java, Sumatra and Borneo. Nor is this the only contrast between the eastern and western portions of the

chain; the grassy plains of Timor, dotted with straggling Eucalypti and acacias, are not less like the Australian sheepwalks than they are unlike the dense tropical forests of Java and Sumatra, clothing the plains and extending to the summits of the highest mountains. The inhabitants of Timor are tall, nearly black, with frizzled hair, and the long Papuan nose; those of Java belong to the short, brown, straight-haired, flat-faced, small-nosed Malayan race, which is in its essential characteristics identical with the Chinese and Siamese of Eastern Asia. The broad inference from these facts is that Timor and the islands westward from it, as far as Lomboek, belong to Australia, and that Bali, Java, and Sumatra belong to Asia.

But there is a distinction of value between the two assertions of our last sentence. Timor does not belong to Australia in the same sense in which Java belongs to Asia; the Australian savage, though approaching the Papuan type to which the Timorese belong, has marked distinctions, both mental and outward; and if we analyse the animal productions, we find that, in Timor for instance, though the general aspect of animal life is undoubtedly Australian, the species are for the most part distinct; the mammalia are altogether so, and in birds, many characteristic Australian groups are wanting to Timor. The birds of Timor contain, as we shall afterwards see, an Australian and a Javanese element; there are as many birds absolutely identical with Javanese as with Australian species; but there are far more birds closely resembling Australian species than birds closely resembling Javanese species. From this we infer that the connection of Timor with Australia has never been, like that of Java with the eastern peninsula of India, a connection of continuity; the countries have always been separated by a sea wide enough to prevent the mammalia and many groups of birds from crossing, but narrow enough to allow the passage of occasional stragglers, which, being isolated from their kind, develope into new though allied species.

A conception unfamiliar to many of our readers perhaps requires further illustration. When the different species of animals were regarded as distinct efforts of the divine Creative Power, it was generally conceived, in accordance with Hebrew tradition, that all were created in some central spot from which they spread to the various regions of the world. As knowledge advanced, this explanation refused to fit the facts; the existence of distinct and well-marked groups in parts of the world the most remote from any imaginable centre, such as Australia

and South America, was found to be inexplicable on that view, —a view which could only have risen among a people possessed of a limited knowledge confined to one region of the earth's surface. Hence arose the hypothesis of centres of creation, which we can only call provisional, but which still lingers in some quarters. This theory localizes the work of creation, not in one, but in a number of centres. It is incredible that the toucan and the prehensile-tailed monkey of South America should have been originally created in Central Asia, and should have wandered from thence to their present homes through climates suitable and unsuitable, and belts of ocean, without leaving a trace behind. What magnetic power could have attracted whole groups of species in that special direction in a course so orderly that not a straggler was left on the way? It was a natural and scientific deduction (strictly scientific in that, while creating a new hypothesis to meet new facts, it abandoned the former one as little as might be) to suppose that at least these abnormal groups were created in the country in which they are now found. Moreover, it was obvious that some countries had more energy of production than others; they were, so to speak, foci from which the surrounding countries derived their inhabitants. If we compare this conception with the facts we have already referred to, we shall find that it fits them much better than the older ones. If all the species of quadruped and bird radiated ready-made from Central Asia, why the break of continuity between Bali and Lomboek? Whence comes it that Western types prevail on one side of a narrow sea, and Eastern types on the other side? But if we assume two such centres, it is easy to conceive that the intermediate islands would display a mixture of productions, the Asiatic type predominating in the Western members of the series, and the Australian type in the Eastern; and thus the hypothesis explains the broad facts. When we look a little closer, however, into the differences between island and island, when we try to distinguish between identity of species and similarity of type, we are struck with a variety of facts which require a new principle to interpret them —that of variability of species. This variability, in a modified form, and as an accompaniment to the hypothesis of creative centres, is now pretty generally admitted. After all, Mr. Darwin's work has mainly been to expand and extend the principle. If it is faithful in few things, why not make it ruler over many things? If it must be called in to explain one fact, what hinders that it should not be the explanation of all? Take a

fact, one of many similar facts in the book before us;—two adjacent islands are inhabited by two species of ground-pigeon, like each other but distinct. The theory of a separate creation of ground-pigeons on each island assumes so much to explain so little, that it is rightly given up. "We admit," says the specialist, "that at some distant period pigeons of the one island may have flown or been floated over to the other; and that ages may have increased and developed the variations, perhaps at first accidental, which distinguished those pigeons from the rest of their stock; but we totally demur to accepting any such view of the formation of the original ground-pigeon. We will go one mile with you, being compelled, but not twain. If we give up our species, we will at least hold fast to our genus." Thus, or somewhat thus, reason the more timid class of naturalists, vainly striving to give a physical significance to the metaphysical abstractions "genus" and "species," or merely shifting the difficulty, for it is as hard to prove that the characters which form a genus are essential, and incapable of being produced by a sufficiently long series of modifications, as to prove the same theme with regard to species.

But we are not emulating the reticence we have admired in Mr. Wallace, and must return to our appointed task of showing what lessons may be deduced from the facts which he records. We have observed that the hypothesis of special centres fits the facts better than the exploded doctrine of a general centre, or the unphilosophical doctrine, patronized by Professor Owen, of occasional creative efforts, scattered over all space and time, which brings us back into the region of miracle. It is undoubtedly true that some countries are distinguished above others by the variety and peculiarity of the forms of life which inhabit them; as we have seen in the case of Australia and India, they feed neighbouring countries, and radiate animal and vegetable forms into surrounding lands. Now, why is this so? If, from its incapacity to explain other orders of facts, we are compelled to give up the special creation hypothesis, whence comes this element of truthfulness in it? Why, for instance, should the island of Timor depend for its fauna and flora on adjacent countries? Why is it more deficient than they in original types? For the simple reason, Mr. Wallace would answer, that it is a newer country. The great Australian continent, the great continent of Asia, have existed for a long series of ages as continents, while the chain of islands which connects them is comparatively newer soil; or,

(which is the same thing as regards animal and vegetable life), has suffered submersion for a series of ages while they continued to exist as dry land. The presence of a line of active and extinct volcanoes running through the chain—forty-five in Java alone—points to the existence of great submarine volcanic forces acting in the line from east to west. Here we have amply sufficient cause for any hypothesis of subsidence and elevation which may be required to explain the other facts. To go further into detail, we find that the western islands of the chain rise from a shallow sea. The straits between Sumatra and the Malayan peninsula, between Sumatra and Java, the wider belt of ocean between both these islands and Borneo, can everywhere be sounded by the hundred-fathom line, and in most parts by the fifty-fathom line, while the eastern islands, Lomboek, Flores, and Timor, rise out of a great depth of sea. There is, therefore, no difficulty in supposing that Sumatra and Java were formerly a part of the Asiatic continent,—a great prolongation of that continent towards the south-east. This would amply account for the similarity of their faunas,—a similarity extending even to those species of mammalia which could not swim across a strait, however narrow. Now, to change this great continental peninsula into two or three separate islands, we must postulate a subsidence, and this is sufficiently accounted for by the accumulated action of a great line of active volcanoes, continually sucking up the substrata, and disgoring them in heaps around certain points; what was continuous flat land would thus become isolated masses of high land. But the eastern islands, surrounded by deep sea, can never—never, that is, under the existing order of things—have been connected with either of the great mainlands on either side of them. Timor may have been much nearer Australia than it is at present; for the submarine bank which fringes the north-west corner of Australia, approaching Timor within twenty miles, indicates a recent subsidence of the northern part of the Australian continent; but between Timor and the bank there is an unfathomable depth of sea. Now, geology tells us that Timor and the adjacent islands are new land, that is, they have been submerged within a recent geological period, while Australia remained solid ground, and was continuously capable of supporting animal life, so that its animals are probably the legitimate descendants of those which dwelt there during the Eocene and Miocene periods. On the other side the islands of the Timor group are separate from

those of the Java group, formerly, as we have seen, continuous with Asia, by a strait equally wide and equally primeval with that which separates them from the Australian bank. These islands then we should expect to find peopled by stragglers from both sides, presenting an admixture of the types of both countries without special types of their own; and this is precisely what the naturalist tells us. Further, we have seen that the connection with Australia was once far closer than it has been for ages past since the subsidence of the bank, and that it is now virtually closed, for few birds or mammals could, even by accident, find their way across 150 miles of sea; the connection, on the other hand, of the most westerly island of the Timor group—Lombok—with Java, has remained persistently the same, whatever changes may have happened to Java in the meantime; we should expect, therefore, that the animals of the group would present a *generic* resemblance to the Javanese fauna about equal with that which they show to the Australian, for the straits having been once equally narrow on each side, the same number of types may have crossed from each country; but we should expect a greater number of *specific* resemblances to Javanese animals, because, while the narrow strait on the Australian side has been replaced by a wide belt of sea, thus cutting off the access of new individuals, there may have been from the Javanese side a continual influx of such, which, mixing with the individuals already established in the islands, have preserved a unity of type. The Australian species, left to themselves, would have opportunities for a separate development; the Javanese would preserve their specific identity with the species of the mother-country. These are the conclusions which would be drawn *a priori* from the geological facts; let us now see how far they suit the zoological facts, confining our attention in the present case to the group of birds, which is sufficiently large and well known to produce appreciable and correct numerical results. “The Timor group of islands contains,” says Mr. Wallace,*

Javan birds	36	Australian birds	13
Closely allied species	11	Closely allied species	35
Derived from Java	<u>47</u>	Derived from Australia	<u>48</u>

“We have here,” he continues, “a wonderful agreement in the number of birds belonging to Australian and Javanese

* Vol. i, p. 322.

"groups, but they are divided in exactly a reverse manner, three-fourths of the Javan birds being identical species, and one-fourth representatives, while only one-fourth of the Australian forms are identical, and three-fourths representatives,"—which is precisely what we were prepared to expect.

We have considered the Timor group for convenience as a single island, but we must not forget that it consists of a number of islands separated by straits as wide and deep as those which divide the group from neighbouring lands. We shall, therefore, expect to find the birds of the more eastern islands approximating more closely to the Australian type, and those of the more western to the Javanese ; that it is so, the following table will show :—

		In Lombock.	In Flores.	In Timor.
Javan birds	...	33	23	11
Closely allied to Javan birds	...	1	5	6
		—	—	—
Total	...	34	28	17
		—	—	—
Australian birds	...	4	5	10
Closely allied to Australian birds	...	3	9	26
		—	—	—
Total	...	7	14	36
		—	—	—

These tables, we think, furnish abundant proof of the thesis that a new country obtains its inhabitants from adjoining lands, and we have now sufficiently illustrated Mr. Wallace's method, which, combining the facts of geology, of geography, and of zoology, gives their joint weight to the conclusions to which it leads. We may proceed to sketch, far more briefly, the result of his inquiries in other parts of the Archipelago.

The great line of demarcation separating two groups of islands, strongly contrasted in many of the aspects of life, is a line which, intersecting the southern boundary of the Archipelago between Bali and Lombock, proceeds northwards between Borneo and Celebes, and then, turning to the west, separates Mindanao and the Philippines from Gilolo. To the west and north of it, we have Borneo, Sumatra, Java, the Malayan Peninsula (essentially belonging to the group), Mindanao, the Sula Archipelago, and the Philippines ; to the east and south, the Timor group, from Lombock eastward, Celebes, Gilolo, Bouru, Ceram, and the Moluccas, the Aru group, and the great island of New Guinea. The first region is eminently Asiatic ; the latter Polynesian, forming a portion of what has

been called by a pardonable bull the great Polynesian continent. If we were disposed to quarrel about words, we should demur to Mr. Wallace's terms—Indo-Malayan and Austro-Malayan—as applied to these two divisions, for the Malay element is in the latter of the two rather intrusive than indigenous, and the words Malayan and Papuan groups, taken from the predominant race on each side, would more happily describe the contrast. The Malayan region includes, besides the great south-western islands, the Philippine Archipelago, of which, as Mr. Wallace did not visit it, we may be content with observing that it presents many features connecting it with the Asiatic continent, together with some anomalies which indicate an earlier separation from the mainland than that of the islands we are about to describe.

We have seen that Java, Sumatra, Borneo, and the Malayan Peninsula, are connected with each other by a shallow sea, which also includes the whole of the Gulf of Siam, and the channel between Borneo and Cambodia; and that their productions are for the most part identical with those of the mainland. Plants of Ceylon, the Himalaya, the Nilgiri, and the Khasia Hills, recur in Java and the Peninsula. The cultivated plants are almost identical with those of India, and the general character of Javan agriculture, as described by Mr. Crawford, precisely resembles that to which we are habituated in Bengal. Rice is the staple; on the mountains wild tribes clear little spots for its culture by cutting down the trees and burning the underwood, and abandon them after a year or two.* This is identical with the *jooming* system of Chittagong and the Khonds of Orissa. In the plains, we get the culture of the high and dry lands, the lowland culture of the rainy season, and that which requires artificial irrigation. The villages embowered in groves of mango and tamarind, the garden as well as the field, are essentially Indian in aspect, while the forest-jungles, with their palms, rattans, orchids, and tree-ferns, are the counterpart of the lower ranges in Sikhim and Cachar. Turning to the animal world, we find the mammalia represented in all the islands by species identical or allied with those of India. The gibbons and monkeys are similar, though not the same; tigers and leopards abound, and the Malayan bear closely resembles the Thibetan. The elephant and both rhinoceroses of the islands are Indian. Altogether there are 48 species common to the peninsula and the islands, some of which, as the monkeys and squirrels, are incapable

* Crawford's *Indian Archipelago*, i. 360. Lewin's *Report*, 10

of crossing even a narrow sea. Borneo, 200 miles (now) from Sumatra, has thirty-six species of mammals in common with it. Java and Borneo, still further apart, have twenty-two common species. All these facts point to a time which geologists would call recent, when these sea-barriers did not exist. The distribution of birds supplies a still stronger argument. Few groups can cross wide seas, and of 350 land birds inhabiting Borneo only ten have passed the Straits of Macassar into Celebes, while at least a hundred are common to Borneo and Java, separated at the present day by a much wider belt of sea.

A similar collation of facts points out that of all the islands Java has been the longest isolated; and Mr. Wallace thus sketches (vol. i, p. 230) the probable course of events:—"Beginning at the time when the whole of the Java Sea, the Gulf of Siam and the Straits of Malacca were dry land, forming with Borneo, Sumatra and Java, a vast southern prolongation of the Asiatic continent, the first movements would be the sinking down of the Java Sea, and the Straits of Sunda, consequent on the activity of the Javanese volcanoes along the southern extremity of the land, and leading to the complete separation of that island. As the volcanic belt of Java and Sumatra increased in activity, more and more of the land was submerged, till first Borneo, and afterwards Sumatra, became entirely severed. Since the epoch of the first disturbance several distinct elevations and depressions may have taken place, and the islands may have been more than once joined with each other, or with the mainland, and again separated. Successive waves of immigration may thus have modified their animal productions, and led to those anomalies in distribution which are so difficult to account for by any single operation of elevation or submergence. The form of Borneo, consisting of radiating mountain chains with intervening broad alluvial valleys, suggests the idea that it has once been more submerged than it is at present (when it would have somewhat resembled Celebes or Gilolo in outline), and has been increased to its present dimensions by the filling up of its gulfs with sedimentary matter, assisted by gradual elevation of the land. Sumatra has also been evidently much increased in size by the formation of alluvial plains along its north-eastern coasts."

This narrative, though it does not explain, hints the possibility of an explanation of several peculiarities in detail, which have not yet been noticed; for instance, the greater similarity between Java and India than between Sumatra, or even the

Malayan Peninsula, and India. A rhinoceros is common to Java and Burmah, while the intervening countries present a different species; and among birds there are several instances of the same character. This connection indicates to Mr. Wallace's mind, perhaps too prone to the gigantesque, and playing with continents and islands as a child with its toys, a period when Borneo and Sumatra were submerged, and on their re-appearance connected with the Malayan peninsula, while Java, remaining isolated, conserved a type of life which belonged to the original connection with the mainland; the actual fauna and flora of the first two islands are thus supposed to be the result of a repeopling by a second wave of life from the peninsula alone, and not, as before, from the mainland. Truly, the rhinoceros of Java is a troublesome animal, requiring so many revolutions of land and sea to get him into his place! But if we at all follow the argument, it is not yet complete, for when Sumatra and Borneo, on their re-appearance, were connected with the Malayan peninsula, what should hinder the rhinoceros of Burmah from finding its way into those islands through the peninsula, unless we further postulate the submergence of the isthmus of Mergui? Might not the explanation be sought in a simpler way? We have seen how closely the aspect of the country in Java resembles that of India; and we can understand that the similarity of aspect, partly producing, and partly produced by, a similarity of vegetation, and connected with a similarity of climate, might have had peculiar attractions for many species of mammalia and birds. The rhinoceros of Burmah and the Sunderbuns may, in the course of its wanderings, have found in no intermediate spot conditions of life so suitable to it as in the two extremes; and the same case may have happened to many a bird, as we know it has happened to man, whose impulses of selection are influenced to a greater extent than many suppose by the external conditions of soil and climate. The Hindu, with his religion, his caste, his language and his architecture, set firm foot in Java, while in Sumatra and Malacca scarcely any traces of him are to be found.

The naturalist is surprised and delighted, when, on ascending some tropical mountain, he seems to return for a period into his native air, and finds, perhaps upon the very equator, the identical flowers and plants which had been the associates of his boyhood. Such were Dr. Hooker's feelings on discovering at the head of one of the Sikkim passes *Thlaspi arvense*,

the common Shepherd's-purse of England; and Mr. Wallace's on the ascent of the Pangerang Mountain in Western Java, where he found at 8,000 feet honey-suckles, St. John's-wort, and guelder-roses, and at 9,000 feet the rare and beautiful Royal Cowslip, *Primula imperialis*, which he figures on page 183 (vol. i.). Mr. Motley gathered twenty European genera on this mountain, including four or five identical species. Such a fact—of plants occurring on an isolated peak, thousands of miles from the nearest of their congeners—can only be explained by causes of a cosmical nature. We know that Europe displays manifest signs of a comparatively recent glacial period; we find them in boulders spread over its plains, in the striæ produced by ice on the rocky sides of the pass of Llanberis, and above all in the boreal forms of plants which occur on the summits of the Alps and Pyrenees, and elsewhere only in the extreme north; all which indications point to a depression of temperature throughout Europe sufficient to float ice over the surface, and to enable plants to cross plains where now they could not exist. As the cold gave way to heat, these northern forms were driven higher and higher up mountain peaks, till now they are found congregated on the summits. The observations made in Java lead us to extend our views so far as to suppose that when an arctic climate prevailed in France and England, a temperate one extended to the very equator, bringing with it northern forms which, as on the Alps, have retired to mountain summits, like those primitive races of men which in India and elsewhere successive immigrations have driven from the plains into inhospitable mountain regions and impregnable forests.

The Austro-Malayan, or, as we have called it, the Papuan, region breaks up naturally into four groups,—the Timor group, of which we have already said as much as is needful, Celebes, the Moluccas, and New Guinea with its dependencies.

Celebes exhibits some striking peculiarities in the distribution of life. In the centre of the Archipelago, between the Moluccas, the Timor group, the Philippines and Borneo, with all which it is closely connected by small islets and coral reefs, we should expect to find in it a sort of common ground uniting the characteristics of all the neighbouring countries, and very rich in species. On the contrary, the number of species is small, and they are for the most part of very peculiar types; while the closest relation it shows is to the distant Island of Java. So deceptive is mere map-knowledge. Celebes, surrounded by

deep sea, presents every indication of a long-enduring isolation ; it is, on the whole, strikingly independent in its fauna, while some of its quadrupeds and birds so remind the naturalist of far-off African and Asiatic species, that he is tempted to the boldest speculations on the origin of its animal life, which must date from a period when the distribution of earth and water on the surface of the globe was very different from that which now prevails, and must have continued to develop itself with very little foreign admixture during the long course of succeeding ages. Of eighteen pigeons in Celebes, eleven are peculiar to it ; of ten parrots, eight are peculiar ; of 128 land birds (including 20 of very wide distribution, found in all the islands,) 80 are entirely confined to the Celebesian fauna,—“a degree of individuality, which, considering the situation of the island, is “hardly to be equalled in any other part of the world.” Many of these, too, are very remarkable in form, as the racket-tailed parrots, two very peculiar cuckoos, two genera of doubtful place in classification, assigned by some to the magpies and by others to the starlings, and the *Basilornis* with a beautiful compressed scaly crest of feathers. Of the mammalia, we may notice five distinct squirrels, and two distinct opossums, marking the eastern and western limits of their respective groups ; for no squirrel is found to the east of Celebes, and no marsupial to the west or north of it. A very peculiar baboon abounds over the island. The Anoa is a ruminant so remarkable in structure, that naturalists doubt whether it should be classed as ox, buffalo, or antelope. The Babirusa (pig-deer, or rather deer-pig) is a hog with long and slender legs, and curved tusks which grow upwards (from the upper jaw) out of bony sockets on either side of the snout, curving backwards to near the eyes, and having the appearance of horns. It has been supposed that they serve to guard the eyes from spines, while the animal roots up fallen fruit among tangled thickets of rattan. But the female, who must seek her food in the same way, is destitute of these appendages ; and Mr. Wallace thinks it more probable that they are relics of a past condition of life in which they were useful. Surely this reasoning is somewhat defective, for in the first place, there are numerous instances of peculiarities possessed by males, which might have been equally useful to their females, such as the horns of deer. The process of selection operates in a different way on the two sexes, for the females are selected by the volition of the males, which does not appear among animals to be guided by any sense of

beauty or suitability, but by mere chance contiguity ;* while the selection among the males is, in the true sense of the word, a *natural* one ; nature herself chooses the strongest and the fittest to propagate the species ; thus, while the males become stronger and fitter for their conditions of life in every generation, the females present no marked improvement of type. The does of different species of deer are much more like one another than the males, both in colour and size, and in the absence of horns, and probably resemble more closely the original or *archetypal* deer ; hen pheasants and birds-of-paradise are quiet quaker-like creatures, destitute of the bright colours and gorgeous appendages of the other sex. Of course these conditions are sometimes reversed, and in many classes we find a natural selection operating on the female, especially in animals of a solitary life, where the female has to protect her own cubs, and where, as the more powerful she is, the better can she protect them, the stronger female is more likely to bring her offspring to maturity ; but in the gregarious and polygamous races selection works almost exclusively on the males. Thus an organ which gives any advantage in the struggle for life will be developed in one sex, while in the other it remains insignificant. Secondly, if the babirusa's tusk is of no use in its present habitat (and if so, it is hard to say in what conditions of life it could be useful), how comes so unnecessary and seemingly inconvenient an appendage to have been preserved ? Would it not be, to use a familiar expression, *in the way*, as soon as it had ceased to be of use, and would not natural selection then work reversely, giving the advantage to those individuals whose tusks were least abnormal, till at last the mouth of the babirusa *developed back* into an ordinary pig's snout. It may be presumption to argue with Mr. Wallace ; but if what we have urged be admitted, those who have taught us to think will be proud to be worsted by their own weapons.

To return to Celebes ; the insects display as marked peculiarities as the birds and mammals. We shall hereafter have occasion to refer to the peculiar Celebesian contour of wing, by which a butterfly might be picked out from a collection as a Celebes species, by a naturalist who had never seen it before. About seventy per cent. of the butterflies in Celebes are found in no other island ; while not thirty per cent. of those in Borneo are peculiar. But the relations with distant

* Even in the human race, according to Clough, love is often simple "juxtaposition".

countries are even more remarkable than the peculiarities. The nearest kindred of the anoa are the *gnus* of South Africa; the nearest kindred of the babirusa is the wart-hog of Africa. *Scissirostrum*, a very peculiar type of bird, is allied to the ox-peckers of Africa. There a bee-eater, *Meropogon*, of which the only near ally was discovered by M. du Chaillu; and lastly the roller of Celebes is quite cut off from its congeners; "there are species of *Coracias* in Europe, Asia and Africa, but none in the Malay peninsula, Sumatra, Java, or Borneo. The present species seems, therefore, quite out of place; and what is still more curious is the fact, that it is not at all like any of the Asiatic species, but seems more to resemble those of Africa." Have we then in Celebes a fragment of Africa which has been bodily transplanted in the seas far east of Asia, like the Himalayan mountain which was brought by the sage in the *Rámáyana*, with all its animals and caves and holy hermits and trees and medicinal plants, for the healing of the monkey warriors that lay dying and dead around the walls of Lanka? Or shall we rather adopt the dream, almost as mysterious, of a time when the Indian Ocean from Madagascar to Celebes presented one continuous forest, along which the lemur and lori swung themselves from tree to tree, accompanied by the birds of the jungle, and the dark-skinned Negrito, whose progeny still inhabit the Andamanese thickets, and the mountains of Mindanao?

The Moluccas form a scattered group of islands large and small. Gilolo spreads his huge limbs around in every direction in imitation of Celebes; Ceram lies from east to west two hundred miles in extent, with Bouru, another large and little-known island, to its west. Better known to fame are some of the innumerable islets, that lie scattered in the straits and bays of the larger islands; for Ternate and Tidore are embalmed in a verse of Milton; Amboyna is the capital of the Moluccas, and Banda, crowned with its ever-smoking volcano, the great nutmeg-garden of the world. Like Celebes, the group is connected by strings of islets with four of the other five divisions of the Archipelago; but its zoology shows New Guinea to be the metropolis which supplied it with life. The land mammals are few in number: and many of them may have been introduced by native praus. The Malays are fond of taming deer, and a shrew or small rodent often finds its way into boats. In short, except their pig, the only land animals peculiar to the Moluccas are four which belong to the marsupial group, so characteristic

of Australia, and extending also into New Guinea. These islands, then, we may assume, belong to the Australian region, and form, as it were, the advanced guard of the great Australian continent. The birds teach us the same lesson. We have seen how closely akin the birds of Java and Borneo are to those of the Indian continent, and we have observed even in Celebes a marked resemblance to them. In the Moluccas, which possess probably as many species of birds as all Europe, this class displays a totally different aspect from that which it presents in India. Here most of the birds belong to sombre-coloured groups, but the thrushes, warblers, and finches are almost unknown in the Moluccas. Pheasants, woodpeckers, and jays have disappeared with them, and their places are filled up by groups of birds remarkable for the brightness of their plumage, the stately bird of Paradise, the brilliant parrots (including that very Australian form, the cockatoo) and pigeons of the loveliest hues. The bird population points immediately to New Guinea, remotely to Australia; the brush-turkey and the cassowary are characteristic of the latter region, while the resemblance to New Guinea is sufficiently proved by the fact that of 78 genera occurring in the Moluccas, 70 are characteristic of New Guinea, and six only of the western islands. It may then be laid down as established that the Moluccas have been stored with land animals principally from New Guinea, and from a comparison of species with species, we may further learn that—three-fourths being peculiar to the Moluccas, and many peculiar to single islands—the group must have existed in its present isolated form, separate from New Guinea, and composed of distinct islands, for a sufficient length of time to mould the species originally introduced into new forms. Indeed Mr. Wallace argues that these islands are not fragments separated from New Guinea, but from a distinct insular region, which has been independently upheaved at a remote epoch; but if this is the case, what should have determined the stream of immigration from New Guinea in preference to other regions, such as the ancient Celebes, which are equally near, or as closely connected by intervening islets? Should we not in that case have had a repetition of the idiosyncrasy of Celebes, and perhaps a repetition of its poverty? As the land and water now lie, it is inconceivable that 70 or 80 genera of land birds—many of them short-flighted, and one literally wingless—could have found their way into the Moluccas, and from one island to another, since the beginning

of time. We have a right then to infer a former attachment of the Moluccas to New Guinea, or at least a much closer connection than at present exists.

We now come to New Guinea, which, with the islands joined to it by a shallow sea, constitutes the Papuan group, the last with which we shall have to deal. New Guinea has been but very partially explored, and its natural productions have only been collected on the semi-detached peninsula to its north-west. Mr. Wallace observes that the main body of the island is the greatest *terra incognita* that still remains for the naturalist (excepting, we presume, Central Africa); and its richness may be conjectured from the fact that a partial exploration of the one known peninsula has produced no less than 250 species of land-birds, many of them of very remarkable types. Indeed, as far as birds are concerned, New Guinea can almost take rank as one of the primary divisions of the earth. Not to speak of the birds of Paradise, "among its thirty species of parrots "are the Great Black Cockatoo and the little rigid-tailed *Nasiterna*, the giant and the dwarf of the whole tribe. The bare-headed *Dasyptilus* is one of the most singular parrots known; "while the beautiful little long-tailed *Charmosyna*, and the great "variety of gorgeously coloured lorries, have no parallels elsewhere. "Of pigeons, it possesses about forty distinct species, among "which are the magnificent crowned pigeons now so well-known "in our aviaries, and pre-eminent both for size and beauty; the "curious *Trugon terrestris*, which approaches the still more "strange *Didunculus* of Samoa; and a new genus (*Henicophaps*), "discovered by myself, which possesses a very long and powerful "bill, quite unlike that of any other pigeon. Among its sixteen "kingfishers, it possesses the curious hook-billed *Macrorhina*, and "a red and blue *Tanysiptera*, the most beautiful of that beautiful "genus. Among its perching birds are the fine genus of crow-like starlings, with brilliant plumage (*Manucodia*); the curious "pale-coloured crow (*Gymnocorvus senex*); the abnormal red and "black flycatcher (*Peltops blainvillii*); the curious little boat-billed flycatchers (*Machærirhynchus*); and the elegant blue "flycatcher-wrens (*Todopsis*)."

* The geographical relationships of the birds are such as to puzzle even Mr. Wallace, usually so fertile in hypothesis. In the first place, we have a double, or give-and-take, relation with Australia; that is to say, many genera have their head-quarters in Australia, the Papuan

* Wallace, ii. 430.

species being stragglers from that country, while there are some groups more especially characteristic of New Guinea, such as the Paradise-birds, which penetrate also into North Australia. Again, there are genera, as we have seen, exclusively found in New Guinea, and there are those which it has given to the Moluccas; and lastly, there is an inexplicable connection with Indo-Malayan countries; birds such as the Maina, not seen in the Moluccas or Celebes, recur in New Guinea, more than a thousand miles from their nearest allies. How did they come there? How could they have passed a thousand miles of sea without leaving any trace on the large and rich islands which stud the intervening space? May we admit to our minds the hints which Mr. Wallace shadows forth of a time when dry land connected Java and New Guinea, and of its later submergence into the ocean, followed by the appearance of Celebes and the Moluccas? To Mr. Wallace such speculations have nothing overbold; to a mind accustomed to the contemplation of vast spaces of time during which enormous changes are produced by the accumulation of slight changes, land and sea seem to have lost their stability:—

The hills are shadows, and they flow
From form to form, and nothing stands;
They melt like mist, the solid lands;
Like clouds they shape themselves and go.

But Mr. Wallace, like many pioneers of speculation, may perhaps be too prone to bring his favourite theories into play. There are cases where he brings such an accumulated weight of evidence in support of some vast change in the relations of land and water, that we are at once convinced. In other cases he puts his theories forward cautiously, like feelers, without the hope of establishing them; and we require for conviction the support of additional evidence drawn from other branches of Natural History. For instance, the hypothesis we have referred to assumes a comparatively recent emersion of Celebes; we do not know how far this would be borne out by geological research; Mr. Wallace's own enquires have convinced us that Celebes is a remarkably ancient land in its present isolated state; and if a Malayan fauna has ever reached Papua, we should be inclined to trace it from Java, through the southern chain of islands. But the botanist, as well as the geologist, should be heard before our minds are made up; it is the concurrence of evidence that produces conviction.

One point is clear, that the fauna of New Guinea is, *for the most part*, derived from the Australian continent: and this fact

absolutely distinguishes it from the western side of the Archipelago. Even in the explored peninsula, the furthest part of the island from Australia, half the birds are of Australian forms, and the few mammalia which have as yet been discovered point more distinctly still to this origin. Except a pig, which must have a western ancestry (pigs are good swimmers), and the bats, all the mammalia are marsupials, and they include two species of true Kangaroos. What renders the similarity of productions more striking is the great dissimilarity of external conditions—"Australia, with its open plains, stony deserts, dried-up rivers, and changeable temperate climate; New Guinea, with its luxuriant forests uniformly hot, moist, and evergreen,"* are regions as unlike one another as can well be imagined.

The Aru islands have been well studied by Mr. Wallace, who resided there during the first seven months of 1857, and whose peaceful security, alone among absolute savages, contrasts strangely with the anxiety and the sufferings of his countrymen in India during that eventful period. The Aru islands are situated about 150 miles to the south-west of New Guinea, in the shallow sea which connects New Guinea with Northern Australia. They consist of a large central island surrounded by lesser ones, and traversed by three narrow channels, which, though called rivers, and having precisely the aspect of rivers, are in reality arms of the sea. The country is flat and principally composed of coralline limestone; and Mr. Wallace has no hesitation in concluding that it once formed a part of New Guinea; and that its river-like channels are in reality the lower courses of rivers which now *débouche* into the sea far to the east. The subsidence of the intermediate country must have taken place without affecting to any great extent the portion which now forms Aru. Here is a conclusion which seems probable enough, as it is the only way of accounting for the river-like channels, which are too regular in width and depth, and too sinuous to be the result of fissures of upheaval, or to be due to the action of winds and currents; and the collections made by Mr. Wallace fully confirm it. Of 100 species of land-birds collected in Aru, eighty have been found in New Guinea, including a wingless cassowary, two brush-turkeys, and two short-winged thrushes, incapable of passing 150 miles of open sea. In Ceram, on the other hand, about the same distance from New Guinea, only 20 per cent. of the birds, instead of 80, are identical

* Wallace, ii. 436.

with those of New Guinea; and these are not terrestrial or forest-haunting species. A kangaroo and other mammals are common to Aru and New Guinea, but not found in Ceram; and the butterflies of Aru are all New Guinea species, or closely resembling them, which is not the case in Ceram. A combination of observations, such as this, cannot be withstood, and the enquiries of a botanist would doubtless lead to the same results.

We now proceed to sketch some of the more interesting features of the natural history of the islands without special reference to geographical distribution; and, reserving to the last the wanderings of man, we shall commence with those man-formed apes which are at once the puzzle of the naturalist, and the bugbear of the theologian; *—so like ourselves and yet so unlike. The orang-utan, or, as the Dyaks call it, Mias, inhabits Sumatra and Borneo, but is rare in the former island. He is found only in a swampy country covered with virgin forest, where he can roam in every direction, passing from treetop to treetop without once coming down to the ground. He walks half-erect along the branches, and occupies during the night a nest of dry wood, covering himself in wet weather with *Pandanus* or fern leaves. He pelts his pursuers with branches. The durian is his favourite food (wherein he resembles his historian), but all kinds of fruit tempt him. The mias is never more than four feet two inches in height, but from finger-tip to finger-tip reaches seven feet eight inches—an enormous expanse; and the old males are further distinguished by their breadth of face. Mr. Wallace shot several specimens of an allied species, the *Simia morio* of Owen, without the lateral protuberances of the face, and with broad upper incisors, but similar in habit and locality. He gives an entertaining account of his experiences in endeavouring to nurse a young mias, which appears to have resembled the human infant in helplessness as well as in other characteristics.

The Siamang of Sumatra is the largest monkey next to the mias. It is three feet high, and tail-less, swinging through the

* We might add, the torment of the logician, who is exasperated by arguments like these :—The Chimpanzee has a *hippocampus minor* in the posterior *cornu*, &c., and no soul; man also has a *hippocampus*; *ergo*, man has no soul. To which the only reply a learned Professor considers it possible to make is something of this sort :—man has a soul *and* a *hippocampus*; the chimpanzee has no soul, therefore no *hippocampus*; which is very good mediæval logic, but can hardly pass muster in a period of positive philosophy, which after all means only a rigid adherence to facts.

trees like an *Hylobates* with its enormously long arms. There are gibbons* (*Hylobates*) in all the Indo-Malayan islands; apparently a separate species in each, and also several kinds of monkeys proper, of which the most peculiar is the *Nasalis larvatus* of Borneo, which is as large as a three-year-old child, and has a fleshy nose longer than that of the biggest-nosed man. Nature is here clearly making fun of us. In Celebes there is a baboon, *Cynodithecus*, jet-black, with a dog-like muzzle, large red callosities, and an inch of tail. This animal marks the furthest eastern range of the quadrumana, and singularly enough, it is an allied species that stretches furthest to the north-west,—the well-known ape of the rock of Gibraltar.

The Archipelago possesses also a few of that curious group of nocturnal quadrumana known collectively as lemurs. The *Galeopithecus*, common in Borneo, has a membrane stretching all round the body, as far as the points of the toes and tail, which serves as a parachute, and enables it to fly or glide obliquely downwards from tree to tree. The lemurs belong especially to Madagascar, where their typical forms are found, but as after a long interval of sea they recur, mostly in aberrant forms like the one described, in the Malayan islands and India, some naturalists have jumped to the conclusion that a lost continent, to which they give the name Lemuria, formerly bridged the void, and connected Madagascar with the islands of the eastern sea. Some such theory seems necessary to explain the presence of African forms in Celebes, and we shall see that it would assist us to understand the distribution of man; but the evidence is as yet too vague to give the hypothesis the rank of a discovery.

We have incidently spoken of most of the other remarkable mammalia in the islands, and need only refer to the Marsupialia, which haunt the Papuan or Austro-Malayan region; some of these, as the kangaroos of New Guinea, are formed on the strictly Australian type; but the Moluccan *Cuscus* is a peculiar genus of small furry opossums with prehensile tails, very slow in movement, and wonderfully tenacious of life. A heavy charge of shot lodged inside them seems to do them no harm; and they will long survive even a broken spine. This quality marks them distinctly as low in the scale of organization.

* If Linnæus invented a scientific vocabulary, Buffon did his best to invent a popular one, and the compilers who follow him fill their manuals with semi-French words, which belong to no known language. Few of our readers, not brought up on Goldsmith's *Animated Nature* and such like pabulum, have ever heard of a gibbon, or recognize under that name the well-known *Huluk* of Assam and Cachar.

The birds formed the chief object of Mr. Wallace's wanderings, and he brought home a collection of about three thousand skins, including a thousand distinct species, which points to an exuberance of bird life surpassed in few countries. To this, of course, the insular nature of the region largely contributes. In the plains of the Amazon, a vast continuous space of uniform character, a single species often occupies without modification an immense tract of country ; but a region which has for ages been broken up into islands tends to increase and perpetuate accidental variations, and we find in some groups, as the fruit-pigeons, a distinct species almost for every island. We cannot glance over the pages of this book without noticing the number of birds, many of them very abundant, which present some features of remarkable beauty of colouring or peculiarity of form. Of course it may be said that such species attract special notice, and that the inconspicuous crowd are passed over ; but there remains a distinct impression that the birds of the Archipelago are far more brilliantly coloured as a whole than those of India. Here in Bengal a few of the common birds, such as the oriole, the bee-eater, the roller (milkánth), the parakeet, and the Nectarinias, (falsely styled humming-birds*) strike the observer by the beauty of their plumage, but the bulk exhibit sober black and white, or the speckled browns and greys of the English thrushes and sedge warblers. We are hardly out of the temperate region in ornithology, while in Mr. Wallace's countries we pass into the midst of the tropics. We must refer to his own pages for full confirmation of these views. Here we can do no more than glance over a few of the more conspicuous groups.

The first place must be given to the Birds of Paradise, which formed one of Mr. Wallace's chief attractions, and to the knowledge of which he has largely added. A Paradise-bird stripped of its feathers is a sorry sight ; the feet and beak are large, and the general aspect resembles that of a crow, which indeed belongs to the nearest family, but the

* The Anglo-Indian is peculiarly deficient in his nomenclature, and generally borrows the names of American animals, which are similar or supposed to be so. Thus, besides the instance quoted in the text, the hornbill is ordinarily called toucan,—a bird which it only resembles in the size of its beak ; the crocodile and the garial become indiscriminately alligators ; the python is called *boa constrictor* ; the large rock-snake *anaconda* ; the ratel is named sloth, and the great monitor lizard *iguana* ; while, as regards confusion of description, who has not heard of monkeys hanging from the telegraph wires by their long prehensile tails—a feature unknown out of South America !

extraordinary developments of plumage effectually disguise the intrinsic ugliness of the bird. They were early an article of commerce, and as the feet and often the wings were removed for convenience, the most miraculous stories were told by the early Dutch voyagers, who had never seen them alive. They never lighted on earth; they came to Banda to eat nutmegs, which intoxicated them, and made them fall down senseless, when they were devoured by ants. Only in this century have they been seen alive, and by very few voyagers besides Lesson and our author; and several species are still known only from dried and mutilated skins. These are inhabitants of the mountain ranges in the interior of New Guinea, and are prepared for the market by the mountaineers; the Sultan of Tidore for the most part monopolizes them on behalf of the Dutch; and till New Guinea has been thoroughly explored, we must be content to know little about them. Two of the finest species, however, are found in Aru, and were well studied by Mr. Wallace. The Great Bird of Paradise is one of these, and perhaps the most lovely of all. The body is of a rich coffee-brown, the throat emerald green, the head yellow, the two webless feathers of the tail run to thrice the length of the body, forming long undulating curves; but the bird's glory is in the dense plummy tufts of orange-coloured feathers which spring out from underneath each wing. In the season of excitement the birds of the stronger sex (for the ladies are quiet quakerlike creatures of a uniform brown without any superfluity of feather) meet in dancing parties on the highest trees, where they lift themselves up and down and fly from branch to branch, elevating their plumes till they form two magnificent golden fans meeting above the bird. Oblivious of danger in their excitement, they are an easy prey to the hunter, who climbs the tree, conceals his person by a shelter of palm-leaves, and shoots them with knobbed arrows which stun without piercing. The *Paradisea papuana*, a similar but smaller bird, is the only species which has found its way alive to England. Mr. Wallace succeeded in bringing two specimens home, though he was much embarrassed by what our readers will consider a singular experience—the scarcity of cockroaches on board the P. and O. steamers. With strange perversity, these animals were not forthcoming on perhaps the only occasion on which any one ever wanted their presence. The *P. rubra* is found only on the small island of Waigiou, and though wanting the golden glory of the train, is a remarkable bird.

Its side plumes are short and stiff, and of a rich red, with white ends, and the middle feathers of the tail terminate in two long glossy black ribands, flowing in graceful curves.

In the Aru islands, after some days of enforced idleness, Mr. Wallace was beginning to despair, when his boy returned one day with a specimen which, he says, repaid him for months of delay and expectation. It was the Burong Raja or King Bird of Paradise. It was less than a thrush, of an intense glossy cinnabar red, shading into orange on the head and separated from the white of the breast by a band of deep metallic green: the bill yellow, and the feet and legs cobalt blue. Springing from each side of the breast and elevable at pleasure, were little tufts of gray feathers terminated by a broad band of intense emerald green; and the middle tail feathers were wires diverging in a beautiful double curve, and terminated each by a round button of green. No wonder Mr. Wallace thought it the most exquisitely beautiful of the eight thousand known birds, and felt for the first time that he had not come so far for nothing. That generations of such lovely creatures should be born and die through countless ages in the depths of a forest, in an almost unknown isle of the far Indian ocean, without an intelligent eye to gaze upon their beauty, shows the fallacy of the vaunt that all things were made for man.* Man comes upon the scene as the destroyer; he cuts down the forest, tills the soil, spreads his nets, loads his rifle, and exterminates the fairest objects of nature. The ordered monotony of the rice or maize-field is more fatal to bird or beast than all the hunter's efforts, and as human population increases, all the other denizens of the world, except those whom man has taken under his special protection, must dwindle and vanish.

The Magnificent Bird of Paradise has a wonderful ruff of straw-coloured feathers on the nape, and beneath it a second mantle of reddish brown; the whole under surface is green with changeable hues of purple; the cheek and throat rich bronze. The Superb, only known from skins, is black with metallic reflexions; has on its breast a satiny shield of bluish

* "Man," says a late *Quarterly* Reviewer, "is the revelation of a God in nature;"—a sentiment which would be more in place in Fichte than in the ponderous organ of orthodoxy. If he means to restrict his "argument of design" to the design manifest in the conscious mind, he cuts his own throat, and Paley's; if he wishes to assert that only mind can recognize creative mind, and that the trilobites of the Devonian period could not, he should confine his utterances to the nursery.

green, and on the back of the neck a larger one with lateral branches longer than the wing, of velvet black, glossed over with bronze and purple. The Golden has six wires on the head, each surmounted by a tuft of web; the Standard-Wing, one of Mr. Wallace's discoveries, is marked by a pair of long, narrow, erectile white feathers which spring from each wing. *Epimachus magnus* is a long-tailed and long-billed bird of the most vivid colours; and there are several allied species in North Australia.

This group is peculiar to the region we are describing, but there are other groups, if not equally characteristic, still more abundant. Of Parrots, we need only mention the diminutive lorikeet of Java, smallest of its tribe, the little long-tailed green, red, and blue *Charmosyna* of Gilolo, the racket-tailed parrots peculiar to Celebes and Mindanao, *Eos rubra*, the lovely crimson lory of Amboyna, and lastly the cockatoos, that essentially Australian group, of which we find a small white species with yellow crest very abundant in Lombock, and occasionally, it is said, passing over to Bali, a large red-crested species in the Moluccas, and in Aru the fine black cockatoo, with "an enormously-developed head, ornamented with a magnificent crest, and armed with a sharp-pointed hooked bill of immense size and strength" which it employs to crack the Kanary-nut, whose hardness baffles every other bird. The numbers of the parrot tribe found in these islands, when compared with those of continental India, furnish an apt illustration of the remark we have already made on the great superiority of the islands in richly-coloured birds of the tropical type. Of the seven subdivisions of the parrot group, two only are represented in India, the *Palæorninæ* or Parrakeets, of which we have six species, and the lories, of which one species occurs in Assam and Malabar, while in Celebes alone there are ten parrots, in the Moluccas twenty-two species belonging to ten genera, and in the little-explored Papuan region no less than thirty species; and these represent four, if not five, of the seven subdivisions. It is a matter for regret that Mr. Wallace has not given us tabular statistics of the birds which he obtained; our information is to be gathered from scattered hints, and is necessarily very incomplete.

Another well-marked group, the Pigeons, of which Jerdon describes 28 Indian species, is still more abundant in the Archipelago. Papua alone (as we have seen) displays 40 species, including the *Trugon terrestris*, a ground dove, which approaches the strange *Didunculus* of Samoa, remarkable again

for its resemblance to that almost mythical pigeon, the extinct Dodo of the Mauritius. To illustrate the rich colouring of tropical pigeons we may refer to the *Carpophaga concinna*, or nutmeg-eating pigeon of Banda and the Kè Islands ; it is twenty inches long, bluish white, with back, wings and tail of an intense metallic green, with golden, blue, and violet reflections ; the feet coral-red, and the eyes golden-yellow. Upwards of 7,000 feet high on the Java mountains dwells a lovely pink and green fruit-pigeon, and this genus invariably displays brilliant colours, emerald green being the prevalent tint, variously adorned with carmine, lake, and bright yellow.

The Gallinaceous group are not abundant, not so much so for instance, as in the temperate countries of Asia, especially the Himalayas. But some remarkable species haunt the regions described by Mr. Wallace. The Argus pheasant, so conspicuous in museums from the development of its secondary wing-feathers and the rich eye-like spots that stud the whole of its upper surface, is scarcely ever seen in its native haunts, where it runs rapidly over dead leaves with which its colours harmonize. It is snared but never shot. This bird belongs to the Malay peninsula, and also to Sumatra. The *Polyplectron*, or ocellated pheasant, connects the pheasants with the peacocks, and the Fireback connects them with the jungle-fowl ; both these genera are found in Sumatra and Borneo, but are wanting in Java. On the other hand, Java alone can boast the peacock, which is a different species to that of India, having more green and gold and less blue in its plumage. It is the peacock of the whole Eastern peninsula, from Burmah to Assam. The common jungle-cock of India, or a type so similar as to be hardly distinguishable,* abounds in Java and still further east, and Java also possesses the *Gallus furcatus*, green with bronzy feathers on the back and neck, with a smooth-edged violet comb and a large wattle brightly coloured in three patches of red, yellow and blue.

The *Megapodidae*, mound-birds or brush-turkeys, are found only in Australia and a few of the islands ; their peculiarity is that they never sit upon their eggs, but bury them in sand or rubbish, and leave them to be hatched by the heat of the sun or by fermentation. They rake together with their large claws dead leaves, sticks, stones and rotten wood, till they form an enormous mound in which they bury their eggs. A number of birds join in the formation of one of these mounds,

* See Jerdon, ii. 538.

which are sometimes six feet high, and contain as many as fifty eggs. The Maleo of Celebes belongs to this group, but she deposits her eggs in holes on the beach, just above highwater mark. The eggs are large and delicious, and much sought after by the natives; the young bird, if it lives to chip the shell, uncared for by the mother, runs off at once to the forest. It can fly the very day it is hatched. The bird is a very striking one, black and rosy white, as it stalks solemnly along with helmeted head and elevated tail.

We must pass lightly over the other groups; but we cannot forbear to mention the *Cymbirhynchus* of Malacca with its broad bill of vivid blue, contrasting with the black and claret colour of the plumage; the brilliantly green *Calypomena*; the green and brown cuckoos of Malacca with velvety red faces and green beaks; the large cuckoo of Celebes with a yellow, red, and black beak; the large green barbets patched with blue and crimson; the minivet fly-catcher* of Java which looks like a flame of fire as it flutters through the bushes; the blue and green ground-thrushes of Java and Lombeck; the orange orioles; the racket-tailed kingfisher, with the two middle feathers of the tail immensely lengthened, and terminated by a spoon-shaped enlargement; the metallic green starlings; and the great two-horned hornbill which plasters up its mate and her egg with mud in the hole of a tree, and feeds her, during the period of incubation and till the young one is fledged, through an orifice left open for the purpose.

After the Birds of Paradise, perhaps Mr. Wallace's greatest enthusiasm was aroused by the insects; but here we cannot follow him so closely. The insects of the Eastern Archipelago present a general resemblance to those of India, and in Java many of the species are identical, though, as we have seen among the birds, the differences of type become more conspicuous as we advance eastward. The group of great butterflies called *Ornithoptera*, or birdwing, is known in India by a showy black and yellow species, the largest Indian butterfly, common in the gardens about Dacca, but not extending westward as far as Calcutta. The Eastern Isles are peculiarly rich in species. In Borneo, Mr. Wallace discovered the *O. Brookeana*, with long and pointed wings of velvet-black, adorned by a band of brilliant green spots; in Celebes, he found *O. remus*, "the largest, the most perfect, and the most beautiful of

* This group (*Pericrocotus*) contains some of the most beautiful birds, red and black, which are found on the continent of India.

"butterflies," of a shiny black, with the lower wings grained with white and bordered by large spots of the most brilliant satiny yellow. He trembled with excitement as he took it out of the net. Two other species inhabit the same island, wheeling through the thickets with a strong sailing flight. In the small Island of Batchian, he found another prize, the *Cræsus*, seven inches across the wings, which are velvety black and fiery orange. His heart beat violently, and he postponed his departure from the island for several weeks, which he spent in obtaining a set of more than a hundred specimens. In Amboyna dwells the *O. Priamus*, which naturalists from Linnæus downwards have placed at the head of the Lepidoptera; *Poseidon*, a magnificent green and black species, was taken at Aru; and another green one, represented by a single specimen, at Waigiou.

The genus *Papilio*, though much restricted, is one of the largest and finest groups of butterflies, containing notably in India the large red and black-tailed butterflies which sail magnificently through our gardens. Of the Eastern species, it is enough to mention the *Arjuna* of Java, whose wings are powdered with grains of golden green, like one of the Bengal species, if not the same; the black *Memnon* dotted over with lines and scales of blue; the bluebanded *Miletus* and green *Macedon* of Celebes; the *Blumei*, with azure spoon-shaped tails; and the brilliant blue *Ulysses*, so conspicuous in the cabinet. But we must pause to direct attention to a sexual peculiarity among insects of this genus,—one of those fertile discoveries which so often reward the labours of travelling naturalists like Wallace and Bates, but which the mere student of a cabinet can never expect to make. Certain butterflies of the genus *Papilio* have two forms of female, totally unlike each other, and one of them totally unlike the male. *Memnon* for instance, a tailless butterfly, has a tailless and a tailed female; and the latter is ornamented with stripes and patches of white so as to make it closely resemble another species, *P. Coön*. Both of these forms are the offspring of either, and no intermediate forms occur; which is as if a white man should have two wives, a black and white one, and while the male children always resembled the father, the female children of each mother were some of them black, and the others white. Parallel facts occur among other species. When Mr. Wallace announced his discovery some years ago at a meeting of the Entomological Society, General Hearsey, if we remember

rightly, remarked that he had observed the same phenomenon among the common *Papilio*s of Bengal, and Mr. Wallace records in this book an instance of two *Papilio*s of Timor, *Enomaus* and *Liris*, of which the males are totally unlike, and belong to different sections of the genus, while the females are all but undistinguishable. The fact presents to us two problems of different orders—the physiological, with which Mr. Wallace does not deal, and the teleological; for the Darwinian naturalist recurs—for convenience—to the phraseology of final causes. The first problem we can only indicate, not solve,—how two forms bearing different sets of secondary sexual characters are simultaneously produced from a mother displaying only one of the sets. If we adopt the atomic theory of physiology enunciated in the last chapter of Mr. Darwin's last book—the “provisional hypothesis,” as he modestly calls it—it is intelligible that germs of the various parts derived from each of two distinct female ancestral types should recur in the offspring, but why the germs of each set should have so close an elective affinity for each other as to exclude any admixture of characters is the puzzling part of the problem. After all, however, the constancy of secondary sexual characters (that is, distinctions not connected with the sexual functions, such as that of colour) is in itself a problem: every male bird or butterfly reproduces its father, and every female its mother, down to the minutest marking of the wings or plumage, and although each individual derives its origin from both sexes, the characters of the two are never mixed. Yet more perplexing is the genesis of specific differences in those ants which have peculiar neuter forms, one or two to each species; for what is propagated in this case is not a set of characters which belonged to one sex of the ancestors, but a set of characters which no ancestors ever had, (for all which have possessed them are by the nature of the case sterile); or rather the power of producing neuters of such and such characters. But to return to our butterflies; teleologically, the case must be explained by some peculiar advantage derivable by the aberrant female from its mimicry of *P. Coön*, such as Mr. Bates has conjectured in the cases of imitation observed by him in South America.* Such mimicry is not uncommon in the animal world. The clear-winged sphinx-moths common in England (*Sesia* and *Egeria*) represent bees, wasps, and flies

* See *The Naturalist on the Amazons*.

of various species so closely as to deceive an ordinary observer and possibly a bird of prey. If in the course of promiscuous variation it proved that those moths which were the least downy in aspect, and most resembled sting-bearing insects of another order, were less liable than others to be snapped up, they would have better opportunities for propagation; the variation would become a selected one, and the accumulation of minute variations in the same direction would tend to establish an imitative species. The walking-leaf and the straw-like *Phasma* are thus explained, and many other facts to the same effect are collected by Mr. Wallace in an interesting paper in the *Westminster Review*. Two very striking instances occur in these volumes;—one of a butterfly in Sumatra (akin to a species common in the Western Himalayas), which in repose resembles a dead leaf almost to its minutest markings; and the other of an oriole in Bouru, which, in the colour of its plumage and even the structure of its bill, closely imitates a bird of an entirely distinct family—the *Meliphagide*; that is to say, a weak bird imitates a pugnacious one, obviously to its advantage. What one butterfly gains by imitating another, it is hard to say; perhaps the imitated species has a peculiarly acrid taste which renders it distasteful to birds.

The butterflies of Celebes have a peculiarity which, even in a crowded cabinet, betrays their habitat. The forewing is either strongly curved, or abruptly bent near the base, the extremity elongated and often hooked. No fact analogous to this has to our knowledge been anywhere noticed. The peculiar shape of the wing must correspond to some special advantage shared by all the groups which possess it; but there is nothing in the conditions of life in Celebes to distinguish it from the adjoining islands. Perhaps, in the long history of Celebes, insectivorous birds may have abounded to such an extent at some former time as to give insects with an elongated wing a considerably greater chance than their fellows; and a peculiarity of this kind, which could in no case be injurious, would not wear away, even when the necessity for it ceased.

In the other orders of insects, we cannot follow Mr. Wallace; suffice it to say that the Coleoptera are remarkable for their forms, and more so for their number; of 125,660 specimens of animals collected by him, 83,200 were beetles, and sometimes a day's work was rewarded by seventy distinct species.

Mr. Wallace is not a professed botanist, and his observations on the flora of the islands, though often interesting and

valuable, are devoid of the completeness and grasp which characterize his remarks on the mammalia, birds and insects. The botany of the islands is not at all unknown in detail; Java has been well explored, and the classical work of Rumphius on the flora of Amboyna, though belonging, like Lord Derby, to the pre-scientific age, is a store-house of information. But we want a naturalist of modern information and wide views, and habituated by experience, like Dr. Hooker, to the comparison of large masses of plants, to test Mr. Wallace's hypotheses by an analysis of the flora of the several islands. Some of these hypotheses we have already shown to be supported by such accumulated proof, that even without the botanical evidence, it is useless longer to preserve an attitude of suspense towards them: others require every confirmation which botany or geology can give them; in all cases further evidence from a new field is singularly satisfactory. Perhaps, at first the botanist would only increase our perplexity. We have already referred to the quasi-European flora of the Pangerang mountain in Java, and it seems that the plants of the highest mountain in Borneo are similarly related to those of Australia,—a cross connection which has nothing answering to it in the animal kingdom.

Plants travel faster and further than most animals. A seed will travel wherever a bird can carry it, and its fertility is seldom impaired by its passage through the digestive organs of the bird. The peepul that springs out of the dome of a mosque, the mistletoe that hangs from a tree-cleft—a mile perhaps from any other plant of the species—attest this; and the agency of birds probably does as much to propagate some orders of plants as that of insects does to fertilize others. But this is not all. How many seeds, especially among the *Compositæ*, are furnished with a *pappus*, which enables the wind to waft them to vast distances! How many drift on the waves to distant shores! There they are more easily accommodated than animals. If the broad general features of life—the soil, temperature, and humidity—are similar, a plant will accommodate itself to any home; whereas the conditions of a bird's or insect's life are far more diverse and complicated. The bird must have her special beetle for food, her special twig for nest-building; the insect, still more importunate, requires a special adaptation to its peculiarities in three distinct stages of life. Hence plants are, within due limits, wider in distribution than animals. But they are also more permanent; the balance

of species is less easily shaken ; if they distribute themselves more rapidly, they maintain themselves more firmly ; and thus the study of plants can teach us more of long past eras, and distant connections between continents, of which no trace remains, than that of animals. For these reasons, we look forward with the greatest interest to the scientific exploration of the Archipelago by a qualified botanist.

Meanwhile, Mr. Wallace's book abounds in interesting sketches and glimpses of the forest scenery of the islands. Borneo is the metropolis of pitcher-plants, which run along the ground or climb over stumps, hanging in every direction their elegant pitchers, long or short, green or mottled, some of which are twenty inches long and hold two quarts of water. The *Vanda Lowii*, an orchid growing on the lower branches of trees, has pendent flower-spikes six or eight feet long which almost sweep the ground. The *Polyalthea*, a genus akin to the custard-apple, has crimson star-like flowers clustering all over the trunk. The tree-ferns and stemless ferns, with fronds ten or twelve feet long, abound everywhere, and every forest is festooned by creepers. Rattan palms hang from the trees, and twist about the ground, in the wildest confusion,—a single palm sometimes ascending and descending several trees in succession. *Pandani* guard the beach like branching candelabra forty or fifty feet high, bearing at the end of each branch a tuft of immense sword-shaped leaves. Figs are seen, of which the aerial roots form a pyramid of near a hundred feet high, terminating just where the branches begin, so that there is no trunk. The palms of Aru display a hundred feet of smooth, straight, slender stem, crowned by drooping leaves. To turn from what feasts and surprises the eye to that which satisfies our grosser appetite, we need only speak of the Durian, the monarch of fruits, beset with a hard spinous covering that wounds a man fearfully in its fall, and almost defies opening, protected further by the most hideous of odours, yet wielding an irresistible impulse over all that have once ventured to taste it—witness Linschoten, Dampier, Crawford, Bastian and our author, who admits that the flavour of the pulp is indescribable, and straightway describes it as reminding him of a rich butter-like custard highly flavoured with almonds, intermingled with wafts that call to mind cream-cheese, onion sauce, brown sherry, and other incongruities ; while, wonderful to relate, it produces no nausea, and “ the more you eat the less you feel inclined to stop ” ; surely some ideal fruit, such as haunts the school-boy's dreams ! The bread-fruit grows

in Amboyna, and is baked entire in the hot embers, and eaten with a spoon. The tree can only be propagated by cuttings, as cultivation entirely aborts the seeds. But sago is the most remarkable production even of these fruit and spice-bearing islands, for it changes the whole character of the people. Rice-eaters have to labour for their food the whole year round, like the inhabitants of temperate climes ; the people of the Moluccas can earn by eighteen days' labour raw sago enough for a year's food, and in ten days more can prepare it for eating. The result is that, as wants beget wants, they are idle and listless, and have fewer luxuries than even the savage Dyaks. The sago tree not only supplies an article of food, but is, like the cocoanut of Ceylon, used for almost every purpose. The mid-rib of the leaf can be made into roofing, panelling, and flooring for houses, and is the material for boxes and all sorts of carpenter's work ; and the leaf itself is the universal thatch of the country.

In spite of the beauty and variety of the vegetation in these islands, Mr. Wallace makes the remark, which has been made by other travellers, that the flower-colouring of the tropics is not so striking as in temperate countries. His experience embraces the two worlds,—the islands of the Archipelago, and the forest-clad plains of the Upper Amazon ; and it fully coincides with what we have all observed in India. Homestay-ing folk judge of the gorgeousness of the tropics by that of a hot-house at Kew, for which all the world is ransacked ; and they forget that the floral splendour which so startles them, so far as it is tropical at all, is culled from the midst of dense and sombre leafage, through which you may travel for hours without meeting any conspicuous mass of floral colouring, such as in England gladdens our eyes at every step in “furze-clad commons, heathery mountain-sides, glades of wild hyacinths, fields “of poppies, meadows of buttercups and orchids—carpets of yellow, purple, azure-blue, and fiery crimson, which the tropics can “rarely exhibit. We have smaller masses of colour in our Hawthorn and crab trees, our holly and mountain-ash, our broom, “foxgloves, primroses and purple vetches, which clothe with “gay colours the whole length and breadth of our land.” In Bengal, as we well know, such sights are never seen, or if seen, it is not in the jungle or the pasture-land, but where man's industry, for purposes other than æsthetic, has massed together flowering plants into an artificial semblance of English floral beauty, as may be seen, for instance, in the cold weather crops

along the Eastern Bengal Railway, where the patches of blue linseed, yellow mustard, and golden safflower, mixed with the bright green of the pepper-plants, and the glowing red heaps of their pods drying in the corner of the field, produce more pleasing effects of colour than could have been anticipated from so homely a source. In the jungles of the plains, a conspicuous flowering tree such as the Palas (*Butea frondosa*), is a grateful relief to the eye, and even in the Himalayas, the wonderful beauty of the vegetation will be found on analysis to depend more on the forms of leafage, the creepers trailing in the air, the arums and epiphytes concealing the trunks of the trees, the delicate fronds of ferns, the marvellous variety in the pods of papilionaceous plants, than in flowers of brilliant colour; the luxuriant leafiness dwarfs and hides the blossoms. The forests of magnolias and rhododendrons in Sikkim, belonging to a distinctly temperate region, furnish no arguments against our view.

The human inhabitants of the Archipelago remain to be considered; and in considering them, we shall select by preference those observations of Mr. Wallace, which deal with man as a subject of natural history. Not that Mr. Wallace falls into the materialist error of looking on *Homo sapiens* simply as one of the eight thousand species which fell under his notice; some of his most agreeable and interesting pages are devoted to the discussion of the social life of these Eastern tribes, their relation to Christianity and to modern civilization, and the various aspects of colonization. But on this last point, especially, we fear to venture beyond our depth, and, while cordially deprecating some of Mr. Wallace's conclusions, we hesitate to imitate him by instituting a comparison between two systems of dealing with Oriental populations, with one of which we are familiar, while the other is totally unknown to us, except from books. Mr. Wallace, like our fellow-townsmen Mr. William Money, whose book he quotes with approval, is a fervent admirer of the Dutch Government in Java; we, on the other hand, are perhaps a little prejudiced in favour of a system which leads rather than governs, which, confident in the elevation of its aims, trusts to the slow result of time to carry them out, and which has already produced the Hindu millionaire, the Calcutta University, and the Brahma Samáj. The Dutch, without doubt, get more from their Indian empire than we from ours: but whether they do more for it, is totally a different question.

Mr. Wallace divides the peoples of the Archipelago into four distinct classes; the Malays and Papuans, and two minor

classes, the Negritos and the inhabitants of Gilolo and Ceram whom he assimilates to the brown Polynesian type represented by the Sandwich islanders. He assigns to two of these classes, the Malays and the Negritos, an Asiatic origin; and to the other two a Polynesian origin,—a division which corresponds geographically with that which, as we have already seen, separates the Asiatic from the Australian fauna. Leaving for after-consideration the question of the source of the Negrito race, we find nothing at which we need hesitate in this conclusion: the Malays are without doubt closely related to the Chinese and the Siamese, and widely distinct from the New Zealanders or the Papuans. A line commencing to the east of the Philippine islands, thence drawn along the western coast of Gilolo, through the island of Bouru, and curving round the west end of Flores, then bending back by Sandalwood island to take in Rotti, divides the two races, and this line corresponds pretty generally with the zoological line, if we make allowance for the greater expansive and permeable power of the Malay race. If two gases are separated by a porous membrane, it is found that they vary in their degrees of permeability; one invades the territory of the other with greater force and in less time than is required for the converse action: and so it is with races; this is expansive and aggressive, that is passive and contracts. Celebes, whose animals approximate rather to the Eastern type, is inhabited by races of Western origin; Bouru, which derives its fauna from New Guinea, is a meeting-place for the two races of men; the Malays of Java have spread along the southern chain, further than its beasts and birds, into the region of the cockatoo and the mound-turkey; and finally the inhabitants of Chandana and Rotti, lying far to the east of the Malay countries, seem connected, perhaps by admixture, with a still more western race, the Hindus—a peculiar circumstance which bears witness to the former wandering habits of a nation now the most sedentary on the face of the earth.*

*Words and institutions of course travel faster than races; but the Hindu religion and language could not have fixed themselves so firmly in Java and Bali without a large admixture of genuine Hindus with the original population. In Bali the four castes, and the era of Saliváhana, have maintained themselves to the present day: and in Java the staple of popular literature consists of tales from the Mahábhárata and the Rámáyana. The Sanscrit root *tap*, in its meaning of religious observance, has spread over the whole of the South Sea islands as *tabu*; just as the Buddhist Sramana is found as a *Shaman* on the shores of the Polar Sea.

The Malays proper are traced by popular tradition to Menangkabao, a tract of country in the centre of Sumatra, from whence they emigrated to Singapore, and thus spread over the neighbouring regions. But this description can only apply to the ruling family in the great Malayan race, which forms, with a few slight exceptions, the entire population of the great islands of Borneo, Java, Sumatra and Celebes, of the Malay peninsula, the Philippine group, and the lesser islands scattered among these. The physical characteristics of all these races are the same—the light olive brown colour, the black, straight, and coarse hair, the absence of beard and whisker (a Javanese with three straggling hairs upon his chin prides himself upon his beard, and cultivates it with care), the short stature, the eyes slightly oblique, the flat face, the straight and well-shaped nose, the prominent cheek-bones; and their languages, although presenting an admixture of several types, have much even of the radical part in common. One or two examples taken from the commoner words in the vocabularies of Messrs. Wallace and Crawford will illustrate this. Rice husked is *bras* in Malay and Javanese, *berasa* or *werasa* in the dialects of Celebes, *bias* among the Dyaks, *bira* as far east as the Sula islands and Tidore, and *bayas* among the mountaineers of Quedah in the peninsula; rice in the husk is called by the well-known Malayan word *padi* in all these countries except in Celebes, where a different root, *asi*, comes into use; a child is *anak* in Malay, Javanese, Madura, Sunda, the language of the Biajuk Dyaks, the languages of Celebes, the Sanguir islands approaching the Philippines, the Rotti islands south-west of Timor, and even the distant Madagascar, which has preserved many traces of Malay colonization; the words for sky, sun, moon, stone, wood, white, blue, and other such elementary ideas are as widely diffused. Turning to the numerals, we find that five is *lima* or *rima* in thirty out of thirty-three languages tabulated by Mr. Wallace, and the same general similarity prevails, with some curious exceptions, in all the languages.

Mr. Crawford holds * some very peculiar views with regard to the origin of the common words in these languages—views which run counter to the generally received belief as to the genesis of dialectical changes. He supposes each dialect to have been originally distinct, and to have approximated to the rest by the adoption

* Or rather held in 1820. We are unaware how far the views of this veteran ethnologist may have been modified before his death in 1868.

of words from the great Polynesian language, which was spoken by no special race, but spread in an undefined manner from Madagascar to the furthest islands of the South Sea. But in the first place, there is no such thing as a general language which is not spoken, and has never been spoken, by a particular people, but from which particular races may draw at pleasure ; and in the second place, multiplicity is not the primary fact in language, but the ultimate fact ; dialects do not approximate, but diverge. If there ever was a great Polynesian language, it is the foundation of all these languages, not a common addition to each. But the vocabularies before us lead to no distinct conclusion as to the existence of such a language ; they rather confirm Mr. Wallace's view of the essential distinctness of the Polynesian and Malayan races. Taking the words which come first in Mr. Crawfurd's "specimen of the Great Polynesian language," *tanah*, land or earth, is simply a Malay word, which does not occur in the Polynesian portion of the Archipelago, and which is common to all the purely Malay countries, except where supplanted by the Sanscrit *bhumi* ; *langit*, sky, is even more distinctly Malay ; *bulan*, moon, spreads beyond the Malay countries, but only into those borderlands of Amboyna and Ceram which are specially exposed to Malay influence ; in Mysol, New Guinea, and even Gilolo quite new roots occur. *Watu*, stone, is Malayan, and has spread to Timor ; *wel*, water, is really Polynesian, as it does not occur in Malay and Javanese, and only in one of the Celebes dialects ; and so on. Thus analysis separates distinctly the Malay from the Polynesian roots. Apparently, the Papuan roots are of a third type, though we have here less material to go upon. Mr. Crawfurd gives as a specimen the language of the Samang, or woolly-haired race in the Malayan peninsula, who are not Papuans but Negritos. Mr. Wallace lent his Papuan vocabularies to Mr. Crawfurd, who mislaid them ; and has only preserved that of an isolated race in the interior of Mysol, which seems to contain a large proportion of peculiar roots, though the numerals are borrowed from Javanese, and the names of introduced animals, such as the deer and pig, resemble those in use in Ceram and other Polynesian islands.

Considering that the Kawi, or sacred language of Java, is of distinctly Sanscrit origin, it is surprising how few Hindu words are to be met with in the Jawi, or common Javanese of the present day. In the hundred and seventeen specimen words given by Mr. Wallace, we find only six that appear to be of

Hindu origin, namely *guni*, fire, from *agni*; *madu*, honey; *untu*, tooth; *sagoro*, sea; *undok*, egg; and *mas*, gold, which is probably derived from the *masha* or goldsmith's weight. To these may be added *mega*, a cloud; *bapa*, father (which belongs, however, to an almost universal class of words, and is rather formed from a child's first utterances than from any root with a meaning); *singa*, lion; *morac*, peacock; *tambuca*, copper; *mutyara*, pearl; *kapas*, cotton; *sutra*, silk; *jarac*, castor-oil plant; *nila*, indigo; *maricha*, pepper; *nyu* (perhaps), cocoa-nut; *pala* (from *phala*), nutmeg (*the fruit par excellence*); *nanas*, pine-apple; *jantra*, spinning-wheel; *danda*, fine or penalty; *raja*, king; *desa* country; *nagara*, city; *agama*, religion (evidently from the Sanscrit *āgama*, which has rather the meaning of a code of religious laws); *tapa*, penitence; *swarga*, heaven; *naraka*, hell; *guru*, a teacher. Most of these are such words as a nation naturally borrows from one more civilized,—religious terms, and the names of introduced articles and luxuries: and their introduction is easily enough accounted for. A few more words, which have not survived in Java, are traceable in other parts of the Archipelago, as the Malay *kapala*, head; *rupa*, face, and *basi*, rain, in the Salayer dialect of Celebes, and *manesh*, a man, which occurs in the language of the Sanguir islands, between Celebes and the Philippines. On the whole, the Malay languages, except the Javanese, are, considering the maritime position of the small and scattered race, and the extent to which they have been brought in contact with foreigners in all ages, remarkably free from extraneous admixture. Before the dawn of history, the Malays formed a marked nationality, with a character of their own, and, in spite of the religious revolution which has attached them, though loosely, to Islam, they have preserved it to this day.

Mr. Wallace considers the Malays deficient in intellect; and in fact they have originated little; but the builders of Boro Budor and Brambanam, and the compilers of the elaborate Malayan nautical code, are not to be ranked with savages. True, they have not, like the Hindus and Teutons, worked out a civilization for themselves, and therefore they exist now in very different grades of social development, from the untaught hill-Dyaks of inner Borneo, who have learnt nothing from Telinga, Arab, or Christian, to the Javanese princes, with their ornate houses and elaborate mode of life. Cannibalism is said to exist, or to have lately existed, among the Battas of Sumatra: but cannibalism by no

means connotes an extremely low grade of civilization; the Feejeeans are among the more intelligent of the islanders, and the Maoris undoubtedly the noblest race in the South Seas; while the Fans of M. du Chaillu are, if we remember right, an advanced people. The habit of eating man's flesh is, in fact, not a characteristic of the species in its lowest aspect, out of which we have all grown, but an abnormal custom, begotten in every case by peculiar circumstances, and one which, unless factitiously adopted, as it seems to be by some of the rebel Maoris, as a principle of union against the stranger, at once dies out when those who have adopted it become amenable to the influences and instincts of the race at large. Among the Malays, who, if not originative, are a peculiarly impressible people, it cannot possibly survive the isolation of a community. Piracy is perhaps a more inveterate evil; but even that is found to give way before strong measures, and what goes even further with Malays, a good example. If the English had held the place of the Portuguese, or even of the Dutch, in these seas, its extinction would have been rapid. But characters such as those of Raffles and Brooke, are rarely to be met with in the history of the Dutch and Portuguese Governments in the East.

The Malays are undemonstrative and diffident in character, taciturn and polite, but seldom merry; and they present a curious contrast to the Papuan branch of the islanders, who have all the animation and liveliness, all the sympathetic character which belongs to Negroes. There are four great tribes of civilized Malays, the Malays proper, the Javanese, the Bugis, and the Tagalas of the Philippine islands: of these the three first tribes are all Muhammadan, excepting the inhabitants of Bali and Lomboek who adhere to Hinduism, mostly of a Pauranic type, and among whom subsist a few Buddhists. The islanders of Luçon are nearly all Catholics, but Muhammadanism still prevails among the Moros of the Southern Philippines. Thus, as a race, we may say that the Malays have joined the religion of Muhammad in a body, though it sits more lightly upon them than upon any of the faith, excepting the Bedouin Arabs, who are not much given to religion in any form. Many of the Javanese have never heard the name of their Prophet, and few indeed keep his precepts. A Wahhabi casuist informed Palgrave that there were two sins only on which God had no mercy,—idolatry or the adoration of the creature, and “drinking the shameful,” by which he meant the use of tobacco. Yet the seven-headed Nága, the deity of his

ancestors, is still carried before a Javanese Raja even on the solemn festivals prescribed in the Koran, and the use of narcotics is probably more extensive and unbridled among the Malays than in any other nation.

The Dyaks are distinctly a branch of the Malay type, but differ from the Malays generally on many points of physiognomy and character. Mr. Wallace was much struck with their simplicity and honesty, with their capacity for being amused, and their high moral tone, which, to those who have only heard of them as head-hunters and pirates, is sufficiently surprising. With temperate habits, abundance of food, a healthy climate, and early marriages, they are still stationary, if not retrograde, in point of population, and dwell in scattered villages among the uncleared forest. Mr. Wallace explains this curious anomaly in a way which seems to us satisfactory. He says that "the average number of children in a Dyak family is not more than three or four; and if in a family of three or four, one or two die before reaching maturity, it is plain that the parents only just replace themselves. The question is thus narrowed to the cause of these small families; and that is obviously a condition which the Dyaks share in common with all savage tribes, the hard labour imposed upon the women. A Dyak woman generally spends the whole day in the field, and carries home every night a heavy load of vegetables and firewood, often for several miles, over rough and hilly paths. Besides this, she has an hour's work every evening to pound the rice with a heavy wooden stamper,"—the familiar *dhenki* of India, "which violently strains every part of the body. She begins this kind of labour when nine or ten years old, and it never ceases but with the extreme decrepitude of age. Surely we need not wonder at the limited number of her progeny, but rather be surprised at the successful efforts of nature to prevent the extermination of the race."

From one extremity to the other of the Malay region, that is to say, in the mountains of Mindanao, in those of the peninsula of Malacca, and in the Andaman islands, are scattered relics of a race which must once have been more numerous. Black and woolly-haired, like the Papuans and the Negroes, they differ more or less from both. The Papuan has a narrow, prominent, and arched nose; the Negrito nose is flat and often snub. The lips are not thick, and the stature is smaller than that of the African races. Their manners are wild in the extreme, resembling those of the

Veddahs of Ceylon.* "They are said," observes Bowring, "to wear no garments, to build no houses, to dress no food. They wander in the forest, whose wild fruits they gather by day, and sleep among the branches of the trees by night. They have no form of government, no chief, no religious rites or usages." He thinks they resemble the Madagascar people more than any other, and this brings us back to the belief we have more than once referred to, that in long distant days a continent bridged over the Southern Ocean from Madagascar to the Indian Isles. The strange connection between the fauna of Celebes and that of Africa is thus accounted for, and the presence in the Archipelago of the singular group of *Lemuridae*, whose principal home is in Madagascar. If *Quadrumanæ* found their way between points so distant, why not man? and small colonies of the human race, cut off from their fellows by an impassable ocean, and driven by the spread of an alien and intellectually higher family into mountains and untraversable thickets, would naturally degenerate, or, we should rather say, would retain their animal habits of life, and develop a purely animal organization. To this race, the name of Negrito, originally given by the Spanish inhabitants of the Philippines, has been extended in the language of science.

The Papuans present a third type, and one almost peculiar to New Guinea and the adjacent islands. Their colour is a deep sooty brown approaching to black. The hair is "harsh, dry, and frizzly, growing in little tufts or curls, which in youth are very short and compact, but afterwards grow out to a considerable length, forming the compact frizzled crop which is the Papuan's pride and glory." The face is adorned with a frizzled beard. The stature is equal to that of a European; the nose is large, arched, and high (a feature repeated in their household gods), and the lips thick. The Papuan is impulsive and demonstrative, laughs, yells, and leaps. He has no shyness, and even the women and children do not avoid a white face. He has a feeling for art, and decorates his house and canoe with elaborate carving. The Papuans are deficient in the affections

* See all the accounts of the Andaman Islands, especially Dr. Mouat's. Professor Owen was struck with the admirable development of the Andamanese whom he examined; indeed, as far as muscular strength goes, this variety of the human race, considered as an animal, ranks very high. Natural selection has advanced with them in an exclusively physical direction, and for tribes living in dense jungle and climbing trees a small stature is a distinct advantage. For the Negritos, see Sir John Bowring's *Visit to the Philippine Islands*, pp. 166, 167.

and moral sentiments, even compared with the Malays ; and though individually they are often rapid learners, their tribes seem incapable of making a permanent advance, owing perhaps to the very impressibility of their shallow minds, which take the form of the moment, and admit no lasting impression ; in this feature they agree with many African races. The typical Papuans are confined to New Guinea, (of which only the inhabitants of the coast, who build their villages on stages in the water, like the ancient lake-villages of Switzerland, are well known to us), and the islands of Kè and Aru, with Mysol and Waigiou. In some of these haunts, especially in Aru, they were well studied by Mr. Wallace. The Timorese are essentially Papuan, and remarkably fine, handsome men.

There is yet a fourth variety of man in the islands—a brown Polynesian type, similar to the Papuan in height, features, and character, but of lighter colour, and with less frizzled hair. This race, which occupies nearly all the islands in the Pacific, occurs within our region in Gilolo, where it is confined to the Northern peninsula, Ceram, and the adjacent islands. They are called Alfuros, and appear as indigenous on these islands, but are continually pressed upon by the Malay races, and in many cases seem to have coalesced with them, and formed cross-breeds. The race, however, is radically distinct, and can be traced from island to island into the pure Polynesian countries.

Mr. Wallace is fond of the Papuans, and sympathises generally with man in the rough, but though the brisk, lively Papuan is in himself a more interesting object than the sedate Malay, it is not difficult to see that the latter possesses a distinguishing mark of the greatest value—the *capacity for improvement*. True, Malay civilization runs almost through the whole human gamut, from the man-eating Battas to the Raja of Johore ; and true also, that individual Papuans, like individual Africans, may prove teachable enough ; but we must judge of race, not by the achievements of selected specimens, nor by the degradation of its lowest elements, but by its collective force and action. Civilization does not embrace more than the upper half of the most highly developed nation : not in Aru or Sumatra are its essentials more wanting than in Seven Dials : the first question to put is, does the nation, as a whole, learn and grow ? Tried by this test, we shall find the Malays to be both recipient and aggressive, and therefore likely to hold their own in the struggle for life, while the Papuans belong to a race, which, however sad it may seem, must in the nature of things recede before civilization and

progress, and finally, like the Caribs and Tasmanians, fade from the surface of the earth, and live only in tradition with the dodo and the moa. There has been a time when civilization and Christianity seemed to sanction the ruthless extermination of aboriginal races ; philanthropy, as a ruling conception, is purely modern, and marks more than anything else the world's advance in morality ; but the weaker must sink before the stronger by inevitable law, and philanthropy can only smooth the dying pillow for races which nature has inexorably condemned.

ART. III.—*Bangádhīp Parájay*. Calcutta: Kāvya Prakās Press. Sakávdá 1791.

ONE of the objects originally contemplated by the projectors of this *Review* was to notice publications not only in the learned Oriental languages but also in the vernacular dialects of the country; and if hitherto vernacular publications have seldom been the subject of leading articles, it has been owing less to any unwillingness on our part to give them such prominent notice than to the paucity of vernacular works which have merited such a recognition. It is true that during the last twenty-five years—the age of this *Review*—the Bengali press of this city has been in considerable activity; but it must be admitted that hardly any literary work of merit and ability has hitherto issued from it. There have certainly been numerous reprints of old standard Bengali books, such as the translations of the *Rámáyana* and the *Mahábhárata* by Kirttivás and Kásirám, and the *Bidyá Sundar* of Bhárat Chandra; but reprints and translations scarcely fall within the sphere of a quarterly critical journal. Of original vernacular publications, some are school-books; others are tales, many of which had better never have been published; others are dialogues dignified with the title of dramas, and others again are books of religious or rather mythological interest; but few of these publications possess sufficient merit, and none are of such a size as, to deserve prominent notice in a Quarterly Review. Whether it is that the Bengali intellect is incapable of prolonged exertion, or that a tropical climate is inimical to sustained effort, or that Bengali authors are too vain to keep for a long time the results of their mental activity from the view of the public—whether one or other, or all of these causes combined, be the true explanation, it is a singular fact that most Bengali books of the day (we speak not of reprints of old authors, or translations from either the Sanskrit or English) are of inconsiderable size. Most of them are pamphlets of a few dozen pages. One out of a hundred may possibly extend to a hundred pages. We are aware that brevity is the soul of wit; but it must be acknowledged by every one acquainted with the current vernacular literature that, while most Bengali authors possess the questionable virtue of brevity, they are dull and stupid to a degree. It is therefore with sincere pleasure that we hail the appearance of

the work the title of which we have placed at the head of this article,—a work which deserves conspicuous notice, if not for any other merit than the singular one, for a Bengali book, of its unusual size. An original work, 600 pages long, is an event in the history of Bengali literature. Indeed, we are unable to recall at this moment any original work in Bengali of equal dimensions, unless it be the *Chaitanya Charitámrita*, which, however, is full of extracts from the *Srí Bhágavat* and other Puránas, and which was composed upwards of a century ago. But size is not the only merit of the performance before us. It is decidedly the best and the greatest novel yet written in the Bengali language.

Of Bengali novels there are only two or three that possess any merit whatever. These are *Aláler Gharer Dulál* by Tek Chánd Thákur, and *Durges Nandini* and *Kapál Kundalá* by Babu Bankim Chandra Chatterjea. Tek Chánd Thákur is certainly a writer of considerable powers of mind, but it must be confessed by his warmest admirers that he is defective in the power of expression. The flow of his language does not keep pace either with the rapidity of his thoughts, or with the number of his conceptions. He has a ready mind but a faltering pen. On the other hand, Babu Bankim Chandra Chatterjea's *forte* lies in language. His style is elegant and easy, often indeed eloquent, and always commensurate with the range of his thoughts. Nor is he wanting in invention. His plots are well conceived, his characters well sustained, and the interest of his stories is kept up to the close. Taking all in all, Babu Bankim Chandra Chatterjea is the greater writer of the two, and probably the most accomplished Bengali novelist of the day. But all the three works to which we have alluded, though they possess considerable merit, have this common defect that they are far too short to be called "novels" in the present day. They are very excellent tales, but they cannot be styled novels, except for the sake of courtesy. The orthodox idea of an English novel of the nineteenth century is that it should be published in at least three volumes, and although some writers are bold enough to disregard the orthodox opinion upon the subject, and publish their works in single volumes, still they are not dignified by the title of novels, unless they attain to a certain recognised length. This cannot be said of any one of the only three novels existing in the Bengali language. We are, therefore, truly rejoiced to find that in the volume before us we have obtained in the vernacular some approxi-

mation to the idea of an English novel, at least so far as size is concerned.

The subject of the *Bangádhīp Parájay* is, as the name indicates, the defeat of a Raja of Eastern Bengal by the lieutenants of the Emperor of Delhi. That Raja was Pratápá-ditya of Jessore, who flourished towards the end of the reign of Akbar, and the beginning of that of his son Jahangir. While his uncle Raja Basant Ráy was reigning, Pratápáditya, being of an ambitious disposition, was impatient to succeed to the throne—a consummation which he had every probability of attaining, as his uncle, though he had two wives, Kamalá and Bimalá, was without issue. In course of time, however, Kamalá gave birth to a son. This event made Pratápáditya sad, as the visions of royalty which floated in his mind seemed to fade away in the distance. But, nothing daunted, his bold and bad heart conceived the idea of removing the unwelcome little stranger by assassination. Accordingly, one day when Basant Ráy was absent from the capital, with some attendants he entered the inner apartments of the palace, with the wicked intention of putting an end to the life of the infantile heir to the throne. Kamalá, however, suspecting the design of the young prince, sent the child out of the palace by a back-door with a faithful maid-servant of the name of Revati, who concealed herself with her precious charge in a bush of *Kachu* (*Colocasia antiquorum*), from which circumstance the boy was afterwards called Kachu Ráy. Basant Ráy, astonished at the depths to which ambition had hurried Pratápáditya, and apprehensive of similar attempts on his own life, thought it best to abdicate the throne in favor of his nephew, and retired to his country-seat at Ráyagada near Behálá, a few miles south of Calcutta. The young Raja, having attained the object of his ambition, now gave loose to his passions. He quarrelled with the neighbouring Rajas, despoiling some of them of their territories ; he murdered the Raja of Jayantí (the Jynteah Hills), ravished his widow, and took his son, Súrya Kumár, into his service. But Haman could enjoy no rest so long as Mordecai sat at the gate. His old uncle, though living in unambitious and contented retirement, must, to complete Pratápáditya's happiness, be removed altogether out of the way. He, therefore, went down to the military station of Laskarpur near Ráyágada, and with the assistance of Bimalá, with whom he had had love-intrigues in former days, contrived to poison his sick uncle. Kachu Ráy, after his father's murder, left his paternal roof and took refuge in the

court of Akbar, where he was kindly treated, and where he received a military education. But the cup of Pratápáditýá's iniquity was not yet full. He conceived the idea of shaking off the yoke of the Emperor of Delhi, and thus making himself independent in Eastern Bengal. With this view he entered into a confederacy with the Afghan chiefs in Cuttack, and the Portuguese pirates who at that time levied black mail on the coasts of the Bay of Bengal, under the leadership of the redoubtable Sebastian Gonzales. But over the ignoble nature of Pratápáditýa sensuality exercised a greater influence than ambition. He had for a long time conceived a passion for a girl in the household of Basant Ráy, named Indumatí, who, it appears, was Pratápáditýá's own daughter by the violated widow of the murdered Raja of Jayantí. As the girl did not respond to his wicked love, he now determined to take her by force. On pretence of a pilgrimage to Jagannáth in Orissa, he moved down with a large body of troops to the military station of Laskarpur, held there a tournament, and ordered the pirate Gonzales and one of his own generals to storm the fort of Ráyagada and carry off Indumatí by force. Gonzales and his party went to the fort in the guise of travellers, and were hospitably entertained and comfortably lodged by the orders of the two queens. In the dead of night the so-called travellers rose up in arms and attacked the fort. In spite of the heroic exertions of the people of Ráyagada and the neighbouring villages, who rushed to its defence, and the indomitable courage of a veiled knight who had suddenly made his appearance on the scene, and who was no other than the lord of the manor himself—Kachu Ráy, the fort was taken. Indumatí was captured, but not given to the arms of the licentious Raja, —Gonzales carrying her away to his own fortress, Gadiz, in the island of Sandvíp in the Bay of Bengal. In the meantime Raja Mán Singh, one of Akbar's generals and his brother-in-law, who had by imperial orders come down to Bengal, with Kachu Ráy in his train, to put down Pratápáditýa and the Portuguese pirates, was stationed on the banks of the Hooghly, only a few miles from Ráyagada. Kachu Ráy, with some of Raja Mán Singh's troops, pursued the piratical Gonzales, took Gadiz, and liberated Indumatí and other captives. Returning victorious from Sandvíp, he, together with the Rajput prince, attacked Pratápáditýa at Ráyagada. The fort, after an obstinate resistance, was taken; Pratápáditýa escaped through a subterranean passage, but was afterwards captured; and Man Singh proclaimed Kachu Ráy ruler of Eastern Bengal.

Such is the main outline of the story. It has two or three sub-plots or episodes of an interesting character, for which we cannot, however, make room. The question now is, has the author succeeded in "fusing together" (to use the words of Browning) "his live soul and this inert stuff"? To effect this is the perfection of art; and it is little dispraise to our author to say that he has not succeeded in doing what only a few rare geniuses are capable of accomplishing. Nevertheless the writer has presented to us a consistent, interesting and life-like narrative. In order fully to perceive this, it would be necessary that our readers should themselves peruse the book in the original. But before proceeding to criticism, it may not be uninteresting if we give the translation of a few selected passages, which may serve to convey an idea of the manner in which the work is executed.

The following is a description of Behálá where the scene is laid, and of the neighbouring villages:—

"Three hundred years ago Sarasuná presented quite a different aspect. The raised road which stretches from the banks of the Kátigangá to the bathing *ghát* of Karunámayí on the Hooghly, near Tollygunge, was formerly known as *Dvári Jángál*, or the high road of Dvári. Originally, the Raja of Burdwan had his capital in these parts. To the north-west of the garden of Dewan Mánik Chánd there is a small village of the name of Laskarpur, where the ruins of old walls, the mounds of dilapidated temples, and the shattered porticoes of the bathing *ghát* of Chatán Bíl, attest the residence of extinct royalty. The queen's tank and the king's tank still refresh the thirsty traveller, weary under the intense rays of a tropical sun. The cantonments were at Laskarpur, and the *Bái-Mahal* of those days has been converted into the modern Behálá. Barse-Behálá was the Raja's *khás-mahal*, and South Behálá was the resort of courtesans. Dvári was the name of a childless old lady of the Rájá's, who at her death left a large sum of money with the Nawab of Rajmahal, with instructions to devote it to the construction of works of public utility. With that money many high roads were constructed in different parts of southern Bengal; and to this day their traces may be seen crossing, like so many vertebral columns, the inaccessible parts of the Sunderbuns. Dvári's *Jángál* was thirty cubits broad, and had high embankments on both sides. The bottom of the *Jángál* was about a *bighá* broad, and it was twenty cubits high. On the sloping sides of the *Jángál* were found chiefly *babool* trees, though here and there were also seen the *palás*,

“the *peepal* and the *banian*. On both sides was marshy ground interspersed with small villages, raised four cubits above the level of the plain, which looked from a distance like islands covered with thickets. The foliage was chiefly that of the *abool* and *Erythrina Indica*; though here and there a solitary palm or cocoanut tree stood like a sentinel, and seemed, with its broad leaves waving in the breeze, to welcome the weary traveller; while every now and then a tall date-tree, shooting up from behind a bamboo-hedge, appeared, with its broad branches moved by the wind, to menace the ill-designing thief, and to scare him away from the village. The *Jángál* passes through the middle of *Sarasuná* and *Básudevapur*; after which for four miles no village is seen near its path. *Rámanaráyan*, a large village to the north-east of *Sarasuná*, bounded on the north by *Dvári's Jángál*, on the west by *Sarasuná*, on the east by the plains of *Gangárámpur* and *South Behálá*, and on the south by *Sitárám Ghose's Road*, is inhabited by about two hundred families, chiefly of the *Bráhman*, *Kshatriya* and *Káyastha* castes. *Sarasuná*, on the other hand, was for the most part inhabited by *bágdís*, *káorás*, *múchís* and other low castes,—its wealthiest inhabitant being *Ugra Sen*, a *Chandál*. To the north of *Rámanaráyan* and *Sarasuná* lie the villages of *Básudevapur* and *Parui*.”

Our next extract shall be the commencement of the action; it is short, but there is in it an air of rural repose which is truly refreshing:—

“It is about five o'clock in the afternoon. It now being January, the water of the fields has dried up; the ditch on the north side of the *Jángál* is also dry; the ditch on the south side only, on account of its greater depth, containing just enough water to enable fishing-boats to pass. As it is a winter afternoon the sun is not powerful, but stands listless like a workman unwillingly pressed into service, or dozes like a *Chaukidar* with his eyes half-shut. The sky is red. The birds seeing the approach of night, and deeming their work for the day to be over, are hastening to their nests with food for their young ones in their beaks. The smoke of the village is rising, but owing to the severity of the cold, it has assumed the shape of a thin cloud, and seeking shelter in the leaves of the distant palm-trees is hanging on the branches of the *banian*. The gentle south breeze is blowing softly, and coming as it does after a long interval, the birds by their gentle warblings are giving it a languid welcome. At the distance of a few yards

“from the north side of the *Jángál* is seen the high embankment of a tank studded with tall palm-trees. On the southern embankment there stands a crooked old plum-tree, under the shade of which reposes an elderly man, with his legs stretched out at full length, a stick under his arm, his dirty clothes scarcely reaching to his knees, and his head wrapped round with a filthy piece of cloth. But he is by no means contemptible in his niche; he appears from a distance to be a fagged husbandman. On his left there is a thick rope of straw, the smoke issuing from which shows it to be a contrivance in which to keep fire; and on his right there is an uncovered vessel, made of palm-leaves, in which are seen *pán* leaves, pots of lime and tobacco, and a *kalke*.* The cows, which were grazing in the fields, are now, on the approach of evening, coming up the high side of the tank, carelessly nibbling at the stray straw which they chance to pick up. As the husbandman raises his head to ascertain how far the sun is above the horizon, he sees a man coming from behind the western bank and going towards the south-west. On seeing him, he cried, Ho, Sirrah, where are you going at this time of day?”

Here is a description of a Bengali beauty. The young lady described is Prabhávatí, the daughter of Ananga Pál, the Prime Minister of Raja Basant Ráy.

“Prabhávatí sat on the marble steps, and rested her soft cheeks on the lotos-like hands of her beautiful arms. Her locks of hair, braided with jewels, covered her person, and, shaken by the gentle wind, waved like the sea. It seemed as if the reflection of dark clouds was dancing in the inky waters of a bottomless lake. Now and then the pure lustre of her body was disclosed by the breath of the god of wind, and appeared, through the mass of her hair, like the moon seen through the dark foliage of a *tamála* tree. Her bright eyes were bent on the ground, as if intently admiring the verdure of the field. As she breathed, her breast gently heaved and her light garment as it fell from her person, discovered a full and spotless bosom.† O, the symmetry of her arm, and the beauty of her shoulder! And what lustre does her neck, looking from behind like the stalk of a lotos, reflect upon her moon-like face! Her lower lip,—how it is curled like the petals of a full-blown rose! and what a colour! slightly

* *Kalke*, a small vessel used in smoking.

† This passage is not literally translated. The original is scarcely consonant with English ideas of refinement and good taste.

"red, as if it had been tinged with an infusion of *álta*.*
 "The middle part of her lower lip is a little depressed,
 "as if two curved lines had parted from that place to the
 "extremities of the upper lip. On the upper lip immediately
 "below the tip of the nose is a pentagonal excavation, three
 "corners of which look filled up. The nose, elongated from the
 "forehead, is straight ; it is impossible to say where the nose
 "begins and the forehead ends,—only the dark hair of the eye-
 "brows is sufficiently distinct, which, commencing at this point
 "and passing the corners of the eyes, touches the young hair on
 "her cheek. The face is almond-shaped, neither round nor long,
 "but brimful of love. Her lips are somewhat open, as if about
 "to speak ; and between them is a row of teeth, transparent and
 "brilliant like pearls. The teeth are small and even ; looking as
 "if they had been set by a plumb line, close but not touching
 "each other, and yet there is no intervening space between them."

This is drawing after the Chinese fashion with a vengeance—a true pre-Raphaelite portrait. The only wonder is, how from a distance, and in the darkness of night, such minutiae were discoverable. Nor is there wanting in the description a touch of the ludicrous. Who but a Bengali romancer would dwell on the nameless charms of a young lady's arm-pit !

The same minute word-painting, descending to the pettiest details, is to be found in the following account of Baradá's swimming in a tank, at the garden-house of Baidya Nath in the island of Sandvip. We doubt if a similar specimen of bombast can be found in the literature of any country in the world.

"Govind refreshed himself by plunging his body in the transparent waters of the tank. After bathing, he stood in the water up to his waist and poured libations to the manes of his ancestors. Baradá, on the other hand, began to swim in the limpid waters. The water pressed against his broad chest, just as the waves of the sea dash against hard rocks. Every now and then as he stretches out his arms and mounts on the water, his body appears up to the waist, and then again the water, beaten into white foam, laves his broad back. He looks as if he were dancing in the water. He is gradually approaching the *ghát*. Before him advances in regular succession wave after wave, extending like a garland from the left side of the pool to the right. On the opposite side, owing to the

* *Alta*, a preparation of lac.

"action of the waves, the silver-like sandy soil is giving way and falling into the water. The water has all become white. The wave-heap begins to break in cadence on the flight of steps. The garland of waves, taking its rise from his shoulders, has extended itself, like two wings, all over the tank. The water-drops are dancing like pearls on the leaves of the lotos. The half-opened lotos-buds are waving on the straight, soft, and thornless branch. The glossy stalks of the lotos are upturned; and the cunning bees, which have been silently quaffing honey, now fly up on all sides. Each time as the undulation recedes the bee settles on the lotos, but the incoming wave makes him shoot up to the height of a cubit, like a star in the sky."

Our readers may ask who this wonderful being is, whose swimming is so marvellously described by our author. He is thus portrayed:—

"How inexpressibly beautiful Baradá looked! Tall, stout, strong, with arms extending to his knees, his forehead broad, his wide elevated chest broadening from his waist, his almond-like eyes, like the seed vessel of the lotos, peering out from beneath his ample forehead, the eye-lashes shading them and softening their dazzling lustre which equals the mid-day sun,—Baradá looked like a Rishi of the Satya Yuga."

In the tournament at Laskarpur, Súrya Kumár, the son of the late king of Jayanti, distinguishes himself, in consequence of which both Pratápáditya and his consort resolve upon giving him in marriage their lovely daughter Saramá. A scene from the courtship of the two lovers may not be unacceptable to the reader. Súrya Kumár enters Saramá's room and finds her sitting on her cot sketching his own likeness. Saramá, blushing, puts the drawing into her box, and then the following conversation takes place:—

"Súrya Kumár said: Saramá, what are you so busy about?
 "Saramá replied: What has brought you here? I am busy just now, so you must please go away. Súrya Kumár smiled and said: I shan't go away, simply because you tell me; unless you push me out with your hands, I shall remain here.
 "Saramá said smiling: Very well, sit down, it won't inconvenience me much. Súrya Kumár said: Well, where is the present you promised to give me? Saramá replied: What has mamma given you? Súrya Kumár: She said she would give me the necklace of her heart. Say now, what will you give me? Saramá: I have not yet been able to decide what

"I shall give you. *You* say, what shall I give you? On this "Súrya Kumár sweetly smiled and looked intently on Saramá, "and she also once looked on him. Their eyes met. O, what divine joy sprung into the heart of each! Neither of them saw any "thing but the face of the other; neither thought of aught else; "neither heard any sound! Saramá, after looking a little on "Súrya Kumar, dropped her eyes to the ground. Both remained thus without any consciousness, till Súrya Kumár, starting "up, as it were, to life, again asked: Saramá, tell me what you "will give me. Saramá replied: You will know to-morrow what "I shall give you; let us see first what the Raja gives you. "Málati entering the room said: Súrya Kumár, dinner is ready; "come, the Ráni is calling you. Súrya Kumár once more "looked at Saramá, and appearing to be vexed, got up. Saramá "followed him."

One of the most powerfully described characters in the book is Revatí, the nurse of Kachu Ráy, who has lost her reason by the ill-treatment of Pratápáditya. Baidya Náth finds her one night in a jungle in the island of Sandvíp. The extract we give below is in our opinion one of the best written passages in the book. Revatí reminds one of Sir Walter Scott's Norna of the Fitful Head.

"On going further, Baidya Náth was startled and stood "still. He had heard the sound of a human voice, and it "seemed as if the voice had stopped on hearing the noise of his "own footsteps. He looked round, but could see no one. "His hair stood on end for fear. He repeated the name of "Durga, and proceeded. As he had heard the sound of a human "voice in a solitary jungle in the dead of night, he was filled "with fear: at every step he looked around. He saw before "him a black wall about three cubits high, supposed it to "enclose the abode of some human being, and imagined that the "voice had been heard from that place. Coming near, he found "it to be a wall of black *hándis* which had been thrown "away after use, the *hándis* being placed one above another. "He found three other walls on the other three sides, composed "of the same materials, each being three cubits high and ten "cubits long. He was astonished, and said to himself,—What "is this? I never saw anything like it; it is a house of " *hándis*, but it has no roof. Going round it on all sides, he "found it had no door; and wishing to spend the night inside, "he took down one row of *hándis*, and went in, and to his "utter astonishment found sitting there an old woman, black,

" emaciated, and shrivelled. She was stark naked, with the excep-
 " tion of a dirty piece of rag round her waist. She had a head
 " of white hair. Her face was emaciated, its bones having
 " a thin layer of dried-up flesh. Her cheek-bones were high,
 " and her cheeks had sunk inside her mouth. Being without
 " a single tooth, and without the apology even of an upper lip,
 " her mouth had a ghastly look; while her toothless white
 " gums added to the horror. Her eyes, which were small, round
 " and sunken in their sockets, were blood-shot; her eye-brows
 " were contracted; her forehead broad and covered with
 " thin lines of flesh; the two bones of her upper chest
 " had bent and joined the roots of her arms; below her
 " shoulders were two horrid cavities; her ribs with only a
 " slight covering of skin might have been counted; from her
 " narrow chest hung her thin, shrivelled breasts, looking like two
 " monstrous leeches; she had no stomach, properly speaking,
 " the skin of her belly touching the vertebral column, and her
 " legs looked like the withered branches of a tree. This
 " hideous creature was sitting on eight human skulls, swinging
 " backwards and forwards. Near her was a heap of rags, and
 " on her right hand was a human skull filled with water.
 " When she saw Baidya Náth enter her fort, she sat still, and
 " gazed at him so fiercely that he was frightened. She then
 " gave such an unearthly laugh that Baidya Náth trembled.
 " The sound of her 'Hi! Hi!' frightened the birds in the
 " neighbouring trees, and they flew away. After the horrid
 " peals of her unearthly laughter had subsided, the ghastly
 " old woman screamed out:—Baidya Náth, Baradá's father, the
 " zamindar and merchant of Sandvíp! but she rattled on so
 " rapidly that Baidya Náth did not catch the words. Again
 " she said:—Arundhatí, the sister of Anuparáma! your son
 " Baradákánth! and your sircar Govind!—Go away, O thou lord
 " of Sandvíp! I am wretched, lordless, unfortunate, ugly,
 " old,—go away, thou father of Baradákánth! I have no
 " beauty, no youth, no riches! be off, Baidya Náth! Once
 " I had beauty and youth and riches; how will you now serve
 " me? Be off, off, off, thou sinner, the worst of men, wretch,
 " fool, the performer of five sins, devil! Fool! Fool!
 " Fool! And she laughed—'Hi! hi! hi! hi!' It was no
 " laughter—it was the guffaw of a she-devil. Baidya Náth
 " stood fixed like a pillar, and wondered how she knew either
 " him, or his son, or Arundhati. The old woman again screamed
 " out:—Go away, thou father of Baradá, the father-in-law of

“ Arundhatí, and patron of Govind, be off! I am now lordless,
 “ why will you now lodge me? If Kachu Ráy had been living,
 “ then he would have recognized his Revatí. That sinner, Pratá-
 “ páditya, of stony heart! Basant Ráy knew how handsome
 “ Revatí was! How beautiful this forehead would look if
 “ vermillion were put on it! Revatí then got up. Baidya Náth
 “ trembled as she did so, and began to retrace his steps back-
 “ wards. Revatí, however, did not go towards him; she put
 “ the withered log of an arm into the heap of rags, and began to
 “ turn them. She lifted them up carefully, and examined every
 “ part; sprang up; clapped her hands over her head; and, going
 “ three times around her seat of human skulls, sat down again.
 “ She closed her eyes, and presented the outward appearance of
 “ one engaged in rapt devotion. In a moment she opened her
 “ eyes which met those of Baidya Náth, and in a loud voice
 “ cried out:—Who are you? why have you come here? be off!
 “ be off! be off! * * * Revatí said:—When I was young,
 “ even the king of Bengal gazed at me fixedly. I used then
 “ to be gaily dressed and I had golden ornaments on my arms.
 “ Where are those days gone! O, the day that Basant Ráy
 “ found me in the jungle of *Kachu*, how greatly did he honour
 “ me! That day will never come, will never come again! It is
 “ gone,—gone never to return! but my wretched mind forgets
 “ it not, forgets it not, forgets it not; heigho! forgets it not!
 “ —therefore, O Baidya Náth, forget it not; forget not this
 “ old Revatí. With these breasts—ah, with these breasts in
 “ the bush of *Kachu* I gave life to the son of Basant Ráy!
 “ I nursed him with my heart’s blood! Where is he now?
 “ Where am I? Where am I? Where am I? Her eyes rolled
 “ fiercely, and she cried out in a louder and yet louder
 “ tone—Where am I? and the forest echoed the cry—Where
 “ am I? Infuriated more and more, she stretched out her
 “ right arm and waving it near Baidya Náth’s face, exclaimed
 “ —Where am I? Where am I? Tell me where I
 “ am. Don’t you hear me? why will you not hear, now that
 “ I am wretched? You don’t hear; but He (pointing her
 “ finger towards the skies), He is hearing. Look, He is showing
 “ Himself. Saying this, she joined her two hands together, and
 “ made obeisance. Baidya Náth looked round, but saw nothing.”

These extracts will suffice. We shall now, as honest critics, mention some of the defects in the performance before us.

The first and the gravest defect of the story is that it is incomplete. On the capture of Ráyagada, Pratápáditya escapes

by a subterranean passage, is afterwards caught and brought before Raja Mán Singh, and charged with the murder of Basant Ráy. Ballabh the pedagogue and Hazur Mul the general, who were abettors of the foul crime, are ordered to be executed, but the fate of Pratápáditya himself is not indicated. Nor are some of the minor plots brought to a conclusion. We are told, indeed, in the preface, that the author proposes to continue the story in another volume ; but why he should give to the world an incomplete narrative it is not easy to discover. In another chapter or two he might have finished the whole story. As it is, the book is incomplete ; and a graver charge cannot be brought against an artist. The story presents to us the picture of a magnificent palace in an unfinished state. The mighty foundations are laid, the stately columns are raised, the high walls are reared up, the gigantic beams are placed on the walls, but—the roof is wanting. You may call it an enclosure, but it is impossible to call it a dwelling-house ; for there is no protection in it against either the downpour of the ceaseless rain, or the pelting of the pitiless storm.

Another defect of the story is, that the character of Pratápáditya is overdrawn. He is represented as a great king with an immense army, obeyed by many minor kings whom he had subdued, and conceiving vast plans of conquest,—in short, as a Bengali Charlemagne or Charles V. There is no historical basis for this imaginary structure. Neither the *Ain Akbari* nor the *Seir Mutákerín*, nor even the poet Bhárat Chandra himself, who seems to have furnished our author with the ground-plot of his story, gives any support to this exaggerated representation. All that we gather from history is, that Pratápáditya was the petty Raja of a part of Eastern Bengal, and that he was a bad man and a worse ruler. In a historical novel some exaggeration is doubtless allowable ; even Sir Walter Scott, the prince of historical novelists, goes beyond absolute historical accuracy in his marvellous creations. But there is a limit, surely, to liberty of this kind. To magnify an Indian Bobadil into a magnificent monarch is a degree of license which cannot be permitted even to a Bengali romancer.

A third blemish in the story is the want of *vraisemblance* in the manners described. Any one who knows anything of Native society knows that there is no such thing as honourable love-making in Bengal. Indeed, such are the customs and social usages of the country that legitimate love-making is an impossibility. We say *legitimate love-making* ; a Bengali Babu

may certainly make love to the wife of his neighbour, but that would be criminal love. Honourable love-making, that is, the play of the affections of a young unmarried man and a young unmarried woman is impossible in Bengal. The religion of the people commands that every girl shall be given in marriage before attaining the age of ten years, and practically marriage takes place when the girl is 7 or 8 years old; it also forbids the re-marriage of widows. Add to this the fact that Bengali women are shut up in the zenana, and never admitted to what we call society, and it will appear plain that love-making in Bengal is simply impossible. A Bengali gentleman may, like Lord Byron, fall in love with a Bengali girl 10 years old, but it is absurd to suppose that the feeling would be reciprocated. Nor can it be pretended that things were in a different state in the days of Akbar, when the scene of the story is laid. Bengali women might have had, perhaps, a little more liberty than at present; but what about the precepts of the Sástras? The Institutes of Manu were in those days as binding on Bengali parents as they are now; indeed, in those days those institutes had a firmer grasp on the people than at present, as the diffusion of Western knowledge in the country has tended considerably to the shaking of social and religious prejudices. How absurd then is the scene in the room of Saramá given above! How impracticable the ogling between the same Saramá and Súrya Kumár on the parade-ground at Laskarpur! How ridiculous and, at the same time, immoral the love-scene in the garden-house of Baidya Náth in the island of Sandvíp, where Baradá courts Arundhati in the approved fashion of a European lover! We do not blame our author for imitating Sir Walter Scott in his *Ivanhoe*, and giving us a tournament at Laskarpur; but it is simply absurd to transplant into Bengali stories love-scenes from English novels—the manners, customs, social usages, and religious prejudices of the people of Bengal making such love-scenes impossible.

Nor is the incongruity confined to love-scenes. Prabhávatí, a girl of fifteen, dons the military uniform, and with sword, buckler and spear, goes to the defence of Ráyagada, and throws herself into the thickest of the fight. This might be believed of Rajput and Mahratta girls, but history does not furnish us with a single instance of such courage in a Bengali woman. Saramá, like Ratnávali of Srí Harsha, draws the likeness of her lover,—an achievement which it may fairly be questioned whether any Bengali girl in the days of Akbar could perform.

This incongruity in the manners is not the least of the blots in the performance before us.

As regards the style of our author, we cheerfully admit that he has considerable powers of description, but it must be said that his descriptions are tediously minute. A stroke or two from a master-hand is sufficient to raise before the mind's eye a distinct and vivid image; our author, however, is a painter of the Dutch or rather Chinese school, giving us every detail, and yet often producing a confused picture.

The fifth and last fault of our author we shall mention, is his excessive verbosity. Of such wordiness the description of the review at Laskarpur is a notable instance. The reading of fifty mortal pages describing a mock-fight of Bengali heroes, is, we own, a weariness to the flesh. And throughout the work more words are used than are necessary to convey the author's meaning. We venture to say the book might have been reduced to half its present size, not only without detracting from the merits of the story, but with the effect of greatly heightening its interest.

We have been at some pains to point out the defects of our author, not with the view of depreciating his book, but because we believe him to be a writer of unquestioned talents, and are, therefore, anxious that in future he should avoid the blemishes which disfigure his otherwise admirable work. Whatever may be his faults—and we have freely pointed out some of them—it cannot be denied that he has written an exceedingly interesting story, the incidents of which are described with spirit, and the characters of which are well sustained. Though the book appears without the name of its author, it is well known that it is written by Babu Protáp Chandra Ghose, Librarian of the Asiatic Society, and son of the late Babu Hara Chandra Ghose, one of the Judges in the Calcutta Court of Small Causes. As he is young, there is before him a long career of literary usefulness. We trust he will complete the work which he has begun so well, and not only finish the present story, but go on adding story to story and creation to creation, till he obtains an imperishable name in the annals of his country's literature.

ART. IV.—1.—*Acts XI of 1865 and X of 1867 of the Legislative Council of India.*

2.—*Act VIII of 1859 of the Legislative Council of India.*

3.—*The New Draft Code of Civil Procedure.*

4.—*Millett's Small Cause Court Acts, with Notes of cases decided by the late Sudder Courts during the last nine years, with an Appendix containing Rules of Practice and Schedule of Forms.* By Henry Millett, Barrister-at-law, and Advocate of the High Court at Allahabad.

IN No. LXXXV of the *Calcutta Review* for 1866 appeared an article entitled "County Courts and Courts of Small Causes," containing some account of the history of both, and comparing their working. In the present notice it is proposed to sketch the present condition of the Mofussil Small Cause Courts in Lower Bengal, adding some practical observations on their constitution and procedure, and reviewing the particulars in which amendment seems necessary or expedient.

In looking back to the period at which these courts were instituted, it is satisfactory to observe the healthier tone which litigation has assumed, and which points to an undeniable improvement in the relations between labour and capital, in so far at least as one of the great staple manufactures of the country is concerned. The courts were at first and for a considerable time flooded with suits connected with indigo cultivation. In fact, one of the main objects of their institution was to provide for the settlement of such cases. The circumstances which gave rise to these disputes have passed away; breaches of indigo contracts now form a infinitesimal portion of the work; the mahajan has stepped into the place of the factory, and a tribunal originally regarded by the people with dislike and suspicion as an engine of class legislation, has developed into a well-recognized popular institution.

Indeed, when we consider the want which the Small Cause Courts have supplied, the wonder is how their establishment was so long deferred. Before Act XLII of 1860, the moonsiff's court was the only one available for suits of the description provided for by that Act. In all cases of bond-debts, loans, personal property and damages, the plaintiff had to institute a regular case, no matter how small the amount involved. From the moonsiff's decision there lay the regular and special appeals through various

grades of superiors, till at last the fiat of the Sadr Dewani was attained at a cost of time, * trouble, and expense, in comparison with which the sum originally in dispute was often absolutely ludicrous.

There are at present nineteen Courts of Small Causes in Lower Bengal in which the presiding officer exercises the jurisdiction of a Small Cause Court only. In eighteen others, his functions are united with those of Subordinate Judge or Cantonment Magistrate. We have not at hand the means of ascertaining the amount of work performed in other districts, but in Nuddea and Jessore four Judges disposed of 14,110 cases in the past year (1868), and the financial result was a net gain to Government of Rs. 34,777. In these districts the system seems to have taken the firmest root, and to be best appreciated by the community. There were originally no less than eleven Judges in these two districts, of whom two were barristers. At present the staff consists entirely of members of the Subordinate Judicial Service, with the exception of one civilian and one gentleman who has passed the Solicitors' Examination. Formerly the Barrister Judges, who were supposed to be ignorant of the native languages, were allowed interpreters. Familiarity with the vernacular is now, however, justly regarded as an indispensable accomplishment.

By section 29, Act XI of 1865, the Government was empowered to create a "Principal Judge" in any district where there were more courts than one. This has been done in Nuddea and Jessore only. His powers of supervision and control have never been very clearly defined. The 30th section of the Act provides that he *may* sit with any other Judge of the same district for the trial of any suit, and that he *shall* so sit in any case which the other reserves for their joint hearing. It will thus be gathered that it was the intention of the legislature that the Principal Judge should, as a rule, be called in by his brethren in cases of difficulty or importance, where they distrusted their own judgment, or felt desirous of advice and assistance.

The 31st section of the same Act vests the Local Government with power to make rules from time to time, providing "that in such cases as shall be prescribed in such rules, two Judges, or a Judge and a person invested with the powers of a Judge as aforesaid, shall sit together and hear and dispose of suits and applications." Government has not as yet taken any action on this section, and practically the Principal Judge hardly ever sits

* The average duration of cases in the Jessore and Nuddea Small Cause Courts last year was only 20 days.

with his subordinates. Indeed, it so happens that the gentleman who at present fills the appointment disposes of considerably more cases in his own court than any Judge under him*, and his head-quarters are so inconveniently situated that it is impossible for him to visit the other courts without seriously interfering with his own work. It is obvious that to fulfil the objects contemplated by the Act, the Principal Judge should be located in some place commanding easy access to all the other courts, and should not be so oppressed with his own work as to have little or no time to spare for moving about on tour.

Act XI of 1865 also provides (section 35) for the appointment of an officer to be called the Registrar, his duties being chiefly ministerial, though he may enter judgment by confession in certain cases, and also execute decrees in the absence of the Judge. Further, the Local Government (section 40) may invest him with judicial powers in suits not exceeding Rs. 20. The sections above quoted have remained a dead letter, no Registrar having been as yet appointed to any court in Bengal. It is very doubtful whether such an officer would be of any use; his ministerial duties can be, and are, equally well performed by the head clerk, and were he to be vested with judicial powers, it would be virtually to create two courts instead of one, involving the expense of a separate establishment, court-room, &c. Besides, Act XVI of 1868 empowers Moonsiffs to try Small Cause Court cases when the claim involved does not exceed Rs. 50.

We shall now proceed to notice the jurisdiction of the courts as at present established. Wherever a Small Cause Court exists, no suit cognizable thereby is triable by any other court within the same limits. Section 6, Act XI of 1865, defines the cases subject to their jurisdiction, *viz.*, claims not exceeding Rs. 500 as money due on bond or other contract, house-rent, personal property or its value, or damages, provided that the defendant at the time of the commencement of the suit dwells, or personally works for gain, or carries on business, within the local limits of the court's jurisdiction, or that the cause of action arose within the local limits, and the defendant at the time of the commencement of the suit by his servant or agent carried on business or worked for gain within those limits. The Act, however, provides that suits brought against the Local Government or the Government of India, shall be brought in the

* No less than 4,677 in the year under review. The next highest number (Jessore) was 4,086.

court having jurisdiction at the place which is the seat of such Government. "Government," in this section has been held to include Government servants acting in their official capacity—for instance, the Agent to the Governor General at Murshedabad.

It will be noticed that the "locus" of the defendant is what regulates the place of trial. In ordinary civil suits (unconnected with land or other immoveable property) by section 5, Act VIII of 1859, the plaint may be filed in a court within whose jurisdiction the cause of action has arisen, even though the defendant resides outside it. In the English County Courts the general rule is, that the dwelling place or place of business of the defendant determines the district in which the suit is to be commenced; a summons may however, with the permission of the court, be taken out in a district where the cause of action arises, even though the defendant be not residing therein. If there are two or more defendants, one or more of whom reside out of the court's jurisdiction, the High Court's sanction must first be obtained to the trial. (Section 4, Act XXIII of 1861.)

It will be observed that the Small Cause Court has exclusive jurisdiction over the class of cases cognizable by it, therein differing from the County Courts, with whose jurisdiction that of the superior courts is concurrent. There is nothing to prevent parties bringing their actions in the superior courts in England if they choose, even though the demand be cognizable by a County Court. Suitors are, however, deterred from resorting, in ordinary cases, to the higher courts, by the consideration that, even though successful, they will be entitled to no costs in actions founded on contract where the sum recovered does not exceed £20, and in tort when it does not exceed £5, unless the Judge certify that there was good reason for bringing the case in the superior court.

The descriptions of claims triable in a Small Cause Court have been already enumerated: a very full list of the High Court's rulings, as to what cases will or will not lie, is given in Mr. Millett's book in his notes upon section 6. In addition to such suits the Court is vested with a kind of particular jurisdiction in cases of specially registered bonds not exceeding Rs. 500 in amount. (Sections 52—55, Act XX of 1866.) The procedure in such cases is this. The obligee, within one year from the date when the instrument or any instalment secured by it becomes due, presents it to the court with a petition or plaint on a stamp, one-fourth the value of that required in a regular suit for the same amount.

No summons is required to be served on the obligor. On inspection the court, if satisfied that the requirements of the law have been complied with, enters up a decree against the defendant who probably knows nothing of the action taken against him until his property is seized in execution. Section 55, however, provides him with a remedy which is not sparingly resorted to. A specially registered bond is by no means so infallible a security as the creditor in the fulness of his heart may imagine. When he takes out execution, he is usually met under section 55 with one of two objections; either the debtor, admitting execution of the bond and registration, pleads payment more or less, or he boldly avers the registration fictitious. The latter may seem a hazardous averment considering the safeguards by which special registration is guarded. We are, however, acquainted with a case in which the plaintiff got his decree under section 53, and took out execution. The debtor came in under section 55, pleading non-execution of the bond and consequent non-registration. After hearing evidence on both sides as to the *factum* of registration, the court held that fact established and committed the defendant to the Magistrate for perjury. The latter, after a lengthened enquiry, came to a different opinion from that of the Judge, and pronounced the bond a forgery and the registration fictitious. Leave was then obtained to prosecute the plaintiff for forgery, and the preliminary enquiry was held by another Magistrate who agreed with the Judge and released the plaintiff. The above proceedings lasted a considerable time. One can imagine the unfortunate plaintiff's mind not to have been in a very enviable condition during that period. In the innocence of his heart he had probably regarded special registration as the highest form of security known to the majesty of the law.

The new draft Code of Civil Procedure, sections 468-482, contains a set of provisions with regard to specially registered instruments. They do not, however, in our opinion go to the root of the evil. In order to make registration thoroughly effective and preclude the possibility of denial, it should take the form of a judicial proceeding; the party presenting the instrument should give the registrar the name and address of the executant, against whom a summons should be taken out, and copies posted at the doors of the Judge's, Magistrate's and Collector's courts, and at the Police Station within the jurisdiction of which the debtor is residing. If this were done, personation could hardly be effected. At all events this

procedure would give as good security that the party summoned is the one really intended, as that which exists in any civil case. According to the present system the registering officer has generally to depend on a mukhtiyar for identification, and it is a well-known fact that there are mukhtiyars about every court who will identify any body for a very trifling gratuity, varying from about eight annas to two rupees.

This is not the place to enter into a general criticism of the Registration Laws : the one amendment, to the advocacy of which we confine ourselves, is the devisal of some more efficacious means for securing the identity of executants.

Another not inconsiderable item in the work of the courts, is the adjudication of claims to attached property, corresponding with what in England are called interpleader claims. These frequently take up a considerable time ; they are not, however, shown in the periodical statements of business. It has been stated from the High Court Bench that a man's troubles in this country often begin when he has got his decree. Many defendants prefer to reserve their strength for the struggle in execution, and to let the original case against them go by default. When the decree-holder seizes what he conceives to be his debtor's property, he is resisted by a host of claimants—the uncles, brothers, cousins, partners, or creditors of the defendant. It was at one time held by the High Court that the *onus* of proving the property to belong to the judgment-creditor lay on the decree-holder, but, fortunately for that much suffering individual, a subsequent Full Bench ruling transferred the *onus* upon the claimant. (2 Bengal Law Reports, F. B. Rulings 91). The Small Cause Court tries more of these claims than any other tribunal in India, or probably out of it either. When we consider that twenty decrees a day are not unfrequently passed in one court, it is easy to imagine what a rich harvest of claims may be expected to crop up in the execution department.

The decree-holder, however, instead of proceeding against the property, may arrest the debtor's person, and this method of procedure might at first sight seem the most effectual one to realize the debt. In the latter case a month's diet-money (which must be renewed every month the imprisonment lasts) must be first deposited. In the event of arrest the debtor's course of action is very simple. He immediately applies for his discharge under section 273 of Act VIII, filing a list of his property, probably worth two or three rupees, which he chivalrously places at the decree-holder's disposal, and the *onus* is on

the latter to prove that the defendant possesses other property, failing which, the order of discharge is granted. It is evident that the law is here very lenient to the debtor, and in fact execution by arrest of the person is rarely resorted to. We may observe that by the Civil Procedure Code every kind of property belonging to the debtor is liable to seizure: in England wearing apparel, bedding, and tools and implements of trade to the value of £5 are exempted.

The procedure of the courts as to the manner of taking evidence, recording judgment, &c., and as to the service of summonses and processes, is regulated by Act VIII of 1859. All summonses to the defendant are for the final disposal of the case, and not for fixing issues. The summons should, as a rule, be served seven clear days before the hearing. This will give the defendant time to produce his witnesses, if he has any, on the day of trial, and the case may ordinarily be disposed of at one hearing. It frequently happens, however, that a postponement becomes necessary for further evidence, &c. In such cases the party, by whose default the adjournment takes place should pay the costs of the opposite party. With regard to the *quantum* of evidence that should be recorded, considerable difference seems to prevail among the Judges. There is no doubt that that portion of Section 172 of the Civil Procedure, directing the form in which evidence is to be taken in non-appealable cases, applies to Small Cause Courts, but this evidently leaves a good deal in the discretion of the Judge. The late Sudder Court apparently considered only a very brief record necessary. They say in their Resolution of the 1st July 1861—"The two sides of half a sheet of foolscap paper in the summons book should contain the claim of the plaintiff, the reply of the defendant, such brief substance of the evidence, oral or documentary, produced on either side, as the Judge may consider it necessary to write down, and the Judge's decision and judgment." In cases where it is possible to come to a decision at one sitting, while the facts adduced on both sides are fresh in the memory, a very brief abstract may suffice, but where a postponement takes place, it seems essential that there should be a pretty full record of the evidence; without it, it is impossible that the Judge can retain an accurate perception of all the facts for a week or fortnight; even with the record before him, this is often no easy matter.

When the evidence is complete, and the parties or their pleaders have been heard, the court may either pronounce judg-

ment at once, or take time to consider it. If a decree is passed, it may be executed at once on the verbal application of the plaintiff, a privilege not accorded to decree-holders in other civil courts. It sometimes happens that a man, on getting a decree, asks for the immediate arrest of the defendant if the latter is present in court, who is then and there sent to jail if he does not pay. This is an infringement of the right of freedom from arrest while attending court in one's own cause, and in going to and returning from it—*eundo, morando et redeundo*. The new Civil Procedure draft, section 674, establishes this right in the other civil courts, but the section has not been made applicable to Small Cause Courts. Since the Full Bench ruling in *The Maharani of Burdwan versus Srimati Baradisundari Debi*, (1 Bengal Law Reports, F.B. Rulings, 31) women of whatever rank are liable to arrest in execution of decrees, notwithstanding section 21 of Act VIII of 1859.

After judgment either party may, if dissatisfied, apply for a new trial. If the case has gone *ex parte*, the defendant may appear within 30 days after any process for enforcing the decree has been executed. He will only be heard on one of two grounds—either that the summons was not duly served, or that he was prevented by any sufficient cause from appearing when the suit was heard. Before decreeing any case *ex parte*, the court should be particular in seeing that the summons has been properly served, the peon should be examined on solemn affirmation as to the time and manner of service, and should show that he made a *bonâ fide* attempt to serve it personally before resorting to the alternative of sticking it up on the door. In the latter case it is very possible that the defendant has had no notice of the case until his person or property is seized, and when he applies for a new trial, the *onus* is on him to show that the summons was not served—in fact he has to prove a negative. Under the circumstances it is obviously one of the first duties of the court to make sure that service has actually taken place before giving a decree *ex parte*. If the case has been a contested one, the applicant must file a notice that he intends to apply for a new trial at the next sitting of the court, within seven days from the date of the decision he complains against, and if he is a defendant, he must, with his notice of application, deposit the amount decreed against him with costs. When a new trial is granted in a case which has been contested, a new plaint will have to be filed. The decision of the court in the new trial is final.

Having thus briefly sketched the jurisdiction and procedure of the courts, we proceed to mention some points in which it seems to us that they are susceptible of improvement. And first with regard to the anomalous position occupied by the Principal Judge. There is now only one officer of this description in Bengal. His controlling jurisdiction has never been defined; except that his office is made the medium through which certain statements and returns are communicated to Government and the High Court, there is nothing to distinguish him from the other Judges of whom he is nominally the superior. His advice on points of law or procedure cannot be transmitted to the other Judges by correspondence; when required, they must call him in to sit along with them. It so happens, however, that this rarely occurs for two reasons—*firstly*, because it is left entirely in the discretion of the other Judges, whether they call him in or not; and *secondly*, the Principal Judge is so overwhelmed with his own case-work, that it is a positive inconvenience and detriment to the public to require him to leave his own court for any considerable time. Instead of having three heavy courts of his own, his original jurisdiction should be confined to the one lightest in work, and most central in position of all those of which he has the supervision. He should be required to sit a certain number of days in each subordinate court, notice of which should be published in order that difficult cases might be reserved for hearing on those days. Section 31 of the Act gives the Local Government power to make rules for the disposal of business by two Judges sitting together, but as yet no action has been taken on it.

The manner in which applications for new trials are disposed of is also very unsatisfactory. There being no appeal in a Small Cause Court, proceeding by new trial is the only mode of redress open to an aggrieved party. No doubt, the amount involved being generally small, and speedy justice in such cases desirable, the power of appeal would go a great way to defeat the object for which the courts were instituted. It must, however, be remembered that the limit of jurisdiction, Rs. 500, is considerably greater than the whole stock-in-trade, realized and prospective, of the great majority of ryots in this country, who are the parties appearing most frequently as defendants. There are few of them whom a decree for a hundred rupees, together with costs, is not capable of entirely and effectually ruining. It behoves the legislature to enact some efficient safeguard for checking the exercise of a power fraught with such

tremendous consequence to one of the largest and most helpless classes of the community. At present, unless the Judge who has decided the case determines to call in the Principal Judge (a contingency which hardly ever occurs), he sits in appeal from himself, as it were, when a new trial is applied for. Of course if there is some obvious error or defect apparent on the face of the judgment, there can be no difficulty in setting it right, but the majority of cases in which a new trial is sought are not of this simple character. They are mostly cases of disputed facts and conflicting testimony, upon which when the Judge has once made up his mind, he will probably be little inclined to reconsider arguments which he has already weighed and rejected. In the English County Courts an appeal lies to the superior courts of Common Law in cases exceeding £20. We do not think that the right of appeal should be granted in the Mofussil courts, but the rule of the Calcutta Small Cause Court that applications for review and new trials should be heard before at least two Judges, is in our opinion one that should be introduced. Section 31 of Act XI, as we have before observed, empowers the Local Government to make rules on the subject. Either the Principal Judge should be called in, in every case where a new trial is applied for, or, as was proposed by a former Principal Judge, the Zillah Judge; and, in case of a difference of opinion on the facts, the one so called in should have the casting voice. If the difference were on a point of law, a reference might, as at present, be made to the High Court.* According to Section 33 of Act XI, the Principal Judge has the casting voice in a difference of opinion on a point of fact, only when he happens to be senior in date of appointment to the other Judge. We think this requires alteration. If, as was at one time the case, the Principal Judge were junior in date of appointment, he would be placed in the humiliating position of being liable to be overruled by his subordinate, on a point too where his advice and assistance had been expressly solicited. We admit that the Prin-

* "The Court suggest a modification of the existing rules for new trials, instead of which it may be enacted, that where there is a Principal Court of Small Causes, all applications for new trials should be heard by the Judge of that court sitting with the Judge who passed the original judgment, and that where there is no such principal court, the application should be heard before the Zillah Judge sitting with the Principal Judge of the Small Cause Court, and that the Zillah Judge should sit with the Principal Judge whenever application may be made for a new trial in cases tried by the latter officer." Letter from the High Court to the Government of Bengal, dated 12th March 1863.

cial Judge, situated as we have before described him to be, could not possibly spare the time necessary for sitting with the other Judges in new trials. The remedy, as we have pointed out, is to relieve him of the heavier part of his own work, and to post him in the most accessible part of the district over which his authority extends.

The next subject to which we would advert is that of references to the High Court. The courts are empowered to refer to the High Court points arising in the trial or in execution of any case before them, and the case must be decided conformably with the High Court's decision. In all cases triable in Mofussil Small Cause Courts the Judge has a discretion to refer or not as he thinks fit. In the Calcutta court he is bound to refer on the application of a party when the amount in dispute exceeds Rs. 500. We think that in the Mofussil the court should be bound to refer on the application of any of the parties when the amount exceeds Rs. 100. According to the present system too much is left to the discretion of the Judge: he may refer points on which no one wants a reference, and he may refuse to refer those on which a reference is really necessary. That the parties interested consider the points generally referred of little consequence may be gathered from the fact, that in by far the greater number of references no counsel is employed before the High Court. How many applications for references are refused, it is impossible to ascertain. If the standard of reference be not lowered, a register of such applications might be kept and submitted periodically to the High Court, showing the number of such applications monthly, with an abstract of the points argued and the reasons for the refusal to refer.

Lastly, we think that some means should be devised for lessening the costs on the honest debtor, who is ready to confess judgment, and so save the time and trouble of both court and plaintiff. The only indulgence to which he is at present entitled is having to pay only *half* his adversary's pleader's fee. He must pay all the stamps for plaint, vakalatnamah, &c., and the cost of summoning witnesses. A considerable portion of this might be avoided by a very simple expedient. In all cases of liquidated debt or demand let there be a special endorsement on the summons, informing the defendant that, if on the day fixed he is willing to appear and admit the claim, he will save all further costs, and plaintiff should not take any steps to summon witnesses, &c., until the day fixed has elapsed without the defendant having

complied with the intimation. As the plaintiff's pleader in such cases would have had no trouble whatever except simply filing the plaint, his fee should be fixed at an uniform sum of one rupee, irrespective of the amount in demand. At present when the plaintiff files his plaint he has no means of knowing whether the defendant will confess or put him to the trouble of proving his case; he, therefore, takes out summonses against witnesses, procures stamped copies of documentary evidence, &c., with the cost of which, and half the pleader's fee besides, the defendant is saddled when he subsequently comes in and honestly admits the debt. In many cases the plaintiff has no desire to mulct the defendant in costs; he is obliged to sue to avoid limitation. He may even know that the defendant is willing to confess, but still he must have his witnesses and proofs ready on the day fixed, for if he has not taken the precaution of doing so, and from accident or some other unforeseen cause the defendant does not appear, the case is liable to be dismissed as unproven.

Supposing the claim is one for Rs. 100, the plaintiff's costs, if the defendant confesses judgment, would on the present scale be about as follows:—

Stamp on plaint *	...	...	...	Rs. 10	0	0
Vakalutnamah	...	...	...	"	0	8
Pleader's fee	...	...	...	"	2	8
Diet-money and travelling allowances for witnesses †	...	...	...	"	3	0
Talabána	...	...	...	"	2	0
				Total, Rs.	18	0

On the scale we have suggested it would be:—

Plaint	...	...	...	Rs. 10	0	0
Vakalutnamah	...	...	...	"	0	8
Pleader's fee	...	...	...	"	1	0
Talabána for summons on defendant	...	...	...	"	0	8
				Total, Rs.	12	0

The above would correspond somewhat with the special endorsement in the English courts (Broom's Commentaries, p. 150), the difference being that, if in England the defendant fail to

* The stamp on the plaint will be somewhat less when the "Court Fees Bill" becomes law.

† This might be a great deal more if the witnesses were of a respectable rank in life, or had to come great distances. We have known instances of the travelling expenses exceeding the value of the suit.

appear on the day fixed, the plaintiff may obtain a judgment without proving his demand. We would not advocate this in India as it might probably open a door to fraud and collusion, but we think the modification suggested above might be safely and advantageously adopted.

There is another point which we had almost forgotten to mention, which is productive of considerable delay and inconvenience, not only in the courts under review (although, perhaps, occurring there in a greater degree), but in all civil courts, *viz.*, the want of power to punish disobedience to their own processes. Cases have frequently to be put off at great loss and expense to the parties, owing to witnesses not appearing on summons. The courts are obliged to make them over for trial to the Magistrate, thus involving an additional loss of time on the parties who are probably obliged to appear before the Magistrate, to prove the charge. The court *piyada*, who served the summons, has also to go to the Magistrate's court where he is often kept hanging about for a week or more while somebody else has to do his work. Every civil court ought to have, at all events, the power to fine witnesses for neglect to appear on summons, and out of the fine to refund to the party summoning the expense of the warrant or other process by which attendance has ultimately been compelled.

ART. V.—REVIEW OF THE PROGRESS OF SANITATION IN INDIA.

THE following sketch is intended to represent a general view of the progress of sanitation in India during the decennial period ending with 1869. Before the commencement of the ten years noted, or previous to the termination of the mutinies, sanitation, as now practised in this country, can scarcely be said to have been initiated. But following on the transfer of British India to the Crown, and the consequent more direct attention of the British public to its Indian possessions, the sanitary movement then in progress in England was by various earnest reformers urgently demanded for India. For some years previously, thanks to Wakley of the *Lancet*, Lee of the *Medical Times*, to Rose Cormack of the *British Association Medical Journal*, to the *Sanitary Review*, to Ranald Martin, to Simon, Sutherland, Milroy and others, the necessity of sanitation, in the broadest or "State" sense of the term, had been pressed upon the public and upon those set in authority. The annual reports of the recently formed Medical Department of the Privy Council, with Simon at its head, had made a large proportion of the reading and discerning public understand, that the extermination of scurvy, dysentery and intermittent fever in London, in Edinburgh, and in Britain generally, had been contemporaneous with drainage, cultivation, the supply of better food, and the adoption of more complete sanitation in other matters, such as cleanliness and attention to water supply and conservancy. *Typhoid*, or as now often called *intestinal* or *pythogenic* fever, for instance, had become associated even in the public mind with accumulations of dirt and filth. Similarly, *typhus* fever was recognized as a result of overcrowding. Cholera, under the ever memorable investigations of Snow, was first mentioned as disseminated through the medium of water. Various trades, proved to be destructive to human life, had been made the subject of legislation, and the followers of them protected, as much as possible, from the injurious consequences of their employment. And passing from civil to military matters, we find that during the time which elapsed between the middle of the Crimean campaign and the transfer of India to the Crown, the health-rate of the soldier at home had been raised from that of the baker and compositor to the standard

of the middle-class civilian. During the Crimean war, the British nation saw the decimation of an army caused by defective sanitation and the want of concert of departments; while its efficiency was so far restored during the same campaign that it contrasted favourably with the legions employed at home, owing to the enforcement of sanitary regulations, and the reinforcement of, and the more systematic control of, the medical department. In the quickly following China war again, similar measures enabled us to show what was then designated as "the almost unparalleled spectacle of an army moving rapidly in an enemy's country, and that country the sea-coast of a semi-tropical district, in the highest condition of health and efficiency," where the mortality was just one-tenth less than the death ratio of the army in the Crimea during the first seven months of that disastrous campaign.

Of course there were not wanting popular writers to compare, not only the first period of the Crimean war with the second and with the China campaign, but also with former periods of English warfare, and with the condition of our troops during the service consequent on the sepoy mutiny. It was recalled to recollection that the sufferings of British troops at Walcheren might have been avoided, had Sir Lucas Pepys, then President of the Army Medical Board, been consulted before the troops were sent to that pestilential locality. It was recollected that a book had long before been published by Sir John Pringle, in which particulars were given of the sickness and death of the soldiers stationed sixty years before in Walcheren. And yet years later, from a similar cause, Sir Eyre Coote, commanding for Lord Chatham (who sailed away to England leaving some 8,000 men *hors de combat*), gave notice that the sick must be abandoned in case of any attack from the enemy! The treatment Wellington experienced during the Peninsula campaign, when (not to the credit of the ministry of those days, by whom ordinary supplies were refused) a number equal to the whole force passed through the hospital twice every year, was also remembered. The disastrous Burmese campaign of 1826 was reproduced in all its haggard particulars; while, lastly, the second Burmese war, approaching in deadliness to the first, was also brought forward as evidence of the little attention previously given to sanitary matters.

The temper of the nation, therefore, excited by the accounts from India during the mutinies, and prepared both by the persistent representations of sanitary reformers, and the results

of sanitation at home, was ripe for insisting on the extension of State medicine and hygiene to this country. Foremost in the good cause was Ranald Martin, who, from his position of vantage as Physician to the India House, and with experience acquired in India, reiterated the truths contained in the first portion of his work "On the Influence of Tropical Climates," and on several occasions addressed the Court of Directors, or the Secretary of State, on various matters connected with sanitary reform in India. It was pointed out that, although sanitary arrangements, begun at home, had been extended with success, especially amongst the troops, to the North American stations, to the Mediterranean, to the West Indies, &c., India, with its 80,000 European soldiers, remained to be dealt with. The statistics of Tulloch, of Sykes, of Hugh Macpherson, and the report of the Army Sanitary Commissioners, were quoted and freely commented upon. Nor was it long before the late Lord Herbert, then Mr. Sydney Herbert, with Crimean recollections and experience fresh in memory, turned his attention to Indian subjects, and especially to Indian sanitation. Than this lamented nobleman, no one was more anxious to impress on Parliament the great fact that prevention is better than cure. And in this the powerful aid of Miss Nightingale was unobtrusively but effectually rendered to the Indian cause. The progress of sanitation in India, thus commenced, will be shown in the following pages. The results are, perhaps, not so apparent for good as could be desired. But sanitation can scarcely be regarded as commencing with the decade. As will become apparent, the initiation of sanitary measures with respect to many important matters dates from a much more recent period than 1859.

One of the first important sanitary steps of the decade was the appointment of Dr. Hathaway to inspect and report on the conservancy arrangements in the principal military stations of the Panjab. Dr. Hathaway's report is one of the best papers ever published on the subject, and recommended the *dry* system of conservancy, presently to be altered, if not improved, into the *dry earth* system. But Dr. Hathaway's paper moreover treats of sanitary matters other than conservancy, entering into the questions of rations, water, intemperance, syphilis, and various subjects affecting the health of the troops. In a special report on Dr. Hathaway's proposals by

a Commission * appointed for that purpose at Delhi, his system of conservancy was unanimously approved, and would probably have been adopted throughout India, as it had been some time before carried out in the Panjab jails, had not Moule's system been shortly afterwards proposed.

At the close of 1863 a Sanitary Commissioner, or rather Health Officer, was appointed for Calcutta, and in 1864 Bombay was similarly supplied.

The year 1863 was further marked by the appearance of the "Report of the Royal Sanitary Commissioners appointed to enquire into the sanitary state of the Army in India." This Commission, first appointed in 1858 under the presidency of the late Lord Herbert,† pursued its investigation by the examination of a large number of Indian officials of all classes, by inspecting the old records of mortality from the commencement of the century, and by obtaining an accurate account of the various military stations of British India, with all sanitary defects as then existing. The two large volumes, the result of this investigation, are monuments of labour and research, and may well be designated the *Magna Charta* of sanitary reform in India ; from which sprung most of the measures of which we are now, or our successors will be, reaping the benefit. And it is only just to add, that to Sir Ranald Martin, K.C.B., belongs the credit of persistent efforts to obtain such a Commission, and of many of the sanitary measures proposed by the Commission.

The small amount of attention formerly vouchsafed to Indian matters, was well exemplified in what followed the publication of this report. The announcement that since the commencement up to the termination of the first half of the present century, the rate of mortality among Europeans in India had averaged 69 per 1,000 annually, was received with astonishment and indignation. Sir Charles Wood, then Secretary of State for India, stated in the House of Commons on July 14th, 1863, that "the Report of the Commission had brought to light a rate of mortality which, before its publication, no one

* *President*—Colonel Paterson.

Members—Surgeon Fowler.

" C. Campbell, Esq., C.E.

† The Report of the Commission is signed by Stanley, *President*.

Members :

Proby T. Cautly.	J. B. Gibson.
J. R. Martin.	E. H. Greathead.
John Sutherland.	W. Farr.

"believed to exist." The *Times* remarked, "people might be prepared to hear" that the mortality "was double that which prevailed in English barracks before anything was done to improve them. Even this exaggerated estimate, we regret to say, would fall very far short of the truth." And other journals, even some medical journals, followed suit, commenting on the *discovery* of the great mortality of Europeans in India. In the *Lancet* only was there any reference made to the writings of those medical officers and others, who had pointed out the death-rate years before. At the very time the House of Commons listened to the statement that the Sanitary Commission had discovered a rate of mortality which no one believed to exist, such works as Col. Sykes's *Statistical Tables*, Macpherson's *Statistics*, Ewart's *Vital Statistics of the Indian Armies*, Chevers *On the Means of Preserving the Health of the European Soldier in India*, and Moore's *Health in the Tropics*, had long passed through the press, all reiterating the oft-told tale of men *disappearing* at the rate of 69 per 1,000.

The principal recommendations of the Royal Sanitary Commission, appointed to enquire into the condition of the Anglo-Indian army, were as follows:—That recruits forwarded to India should be 21 years of age: That the issue of spirits on boardship should be discontinued except under medical advice: That the sale of spirits in the canteen should be discontinued: That the rations should be modified with regard to season: That increased facilities for amusement and instruction should be afforded to soldiers in India: That the period of service in India should be limited to ten years: That invalids should be passed on home without delay: That more attention be paid to drainage and water-supply: That barracks should be built on basements: That the size of barracks should not exceed the proportions required for a half or quarter company: That the cubic space allowed should not be less than from 1,000 to 1,500 feet: That cook-houses, ablution-rooms and latrines, should be constructed on improved principles: That the cubic space in hospitals should not be less than 1,500 feet, and the superficial space 130 feet per man: That the strategical positions be fixed, with a view to reducing the number of unhealthy positions now occupied by European troops: That engineer officers be required to undergo a course of sanitary instruction at Chatham: That a Sanitary Commission be formed at each Presidency, so constituted as to represent the various elements, civil, military, engi-

neering, and medical : That a War Office Sanitary Commission at home be formed in association with the Indian Commissions : That a code of sanitary regulations be authoritatively published : That a system of registration of births and deaths be enforced : That the sanitary duties enjoined on medical officers, by the Medical Army Code, published in October 1859, be made applicable to medical officers in India.

A very brief period elapsed before the above recommendations bore fruit. G. G. O. No. 87 of 1864 stated that, in accordance with the instructions of the Right Hon'ble the Secretary of State, a Sanitary Commission was appointed to consider and afford advice and assistance in all matters relating to the health and welfare of the army, and to supervise the gradual introduction of sanitary improvements in British stations, as well as in towns in proximity to military stations. Mr. Strachey was appointed President, and Dr. Gordon, C.B., Major Cooper, and Captain Williams, R.E., Members, with Dr. Walker as Secretary. Very shortly after, similar Commissions were formed in the Madras and Bombay Presidencies. In the communication from the Secretary of State directing the procedure, the imperative duty of using the best endeavours to bring to bear on the condition of the European soldier in India those discoveries in sanitary science attended with most benefit at home, was impressed on the Indian Government. Hence it was directed that the conclusions of the Royal Sanitary Commissioners should be carried out, not only in the appointment of Indian Commissioners, but also as regarded sites of stations and barracks, diet, recreations, prevention of venereal disease, registration of deaths, &c. &c. And in the Government letter, No. 1044 of 1864, to Sanitary Commissions, it was stated that "Government does not intend that the Commission should be merely a deliberative body, having merely a collective responsibility. It will look to the President as the officer responsible for obtaining and affording the best information and advice on all matters of sanitary import, and for exercising a proper supervision over the whole of the sanitary administration." Practically, although not in name, a department of Public Health had been established.

With the meritorious, but somewhat mistaken view, of correcting any errors into which Indian sanitary authorities might fall, it was ordered by the Secretary of State, that plans, either for the construction or alteration of barracks or hospitals, as well as plans for drainage and sanitary improvement of special localities, should, after approval by the Indian Sanitary Commission, be referred

for final sanction in England! A code of sanitary regulations was also to be framed, and submitted for home revision! For, it was remarked, "many of the officers, serving on the "Indian Sanitary Commissions, will necessarily be unacquainted "with the more recent improvements in sanitary science." But without denying that such may be the case, it may be confidently affirmed, that neither now, nor in 1864, was there any want of officers in India, quite as capable as any at home to carry out Indian sanitary reforms. Otherwise the Service had not possessed a Chevers, a Leith, a Ewart, a Macpherson, a Cornish, or a Murray.

The Sanitary Commissions, as above constituted, proving cumbersome and not being able to move about so freely as necessary, an order was published in 1866 modifying their constitution. The duties have from that period been carried on by one Sanitary Commissioner and a Secretary. But it was ordered that when deemed advisable for the consideration of any particular subject, officers best acquainted with the matter, whether civil, military, or medical, were to be associated with the Commissioner. It was also intimated, that the measures deemed necessary for exercising a more complete supervision over civil sanitation, and for ensuring continued attention to public health, would be further considered. Accordingly, during the following year, Sanitary Commissioners were also appointed for the North-West, the Panjab, Bengal Proper, Oudh, and British Burmah.

In determining the nature of the duties to be discharged by the new Sanitary Commissioners, Government drew attention to the fact that the appointments were created "solely "for the purpose of improving the sanitary condition of the "people," and that considering the magnitude of the task, the officers chosen should not be called upon to undertake any work, which is not intimately associated with the special object for which they are appointed. It was formerly suggested that Sanitary Commissioners should also inspect jails and dispensaries, and superintend vaccination, but on mature consideration the Governor-General in Council was of opinion that "this is *not* advisable." Neither, as was proposed, is it considered advisable that the Sanitary Commissioner should keep a watch over food supplies, as regards deficiencies and scarcity from failure of agricultural operations—such work more properly belonging to district officers. The Government of India record "the absolute "necessity of reducing to reasonable limits the points to which "a solitary Sanitary Commissioner, appointed over a country

"as large as France, should address himself in the first instance." Hence the Civil Sanitary Commissioner should be relieved from all duties connected with cantonments, where local boards of health exist. Briefly stated, the duties of local Sanitary Commissioners are as follows :—

1. To ascertain the existing sanitary condition of the country under their charge, and suggest measures for its improvement.
2. To advise Local Governments and Administrations in matters concerning the public health.
3. To collect information as to the unusual prevalence of diseases in any particular locality, and to suggest measures for their removal; and to supervise measures for the prevention of venereal disease in the neighbourhood of military cantonments.
4. In case of any unusual visitation, to proceed to the spot, endeavour to trace its source, and aid in carrying out remedial measures.
5. To examine all localities in which cholera, fevers, and similar diseases are endemic, and propose means for removing them.
6. To assist in organizing, as well as circumstances will allow, a proper system of registration of births and deaths, unless this duty be entrusted by the Local Government to some other officer.
7. To prepare a medical topography of their respective provinces or presidencies.
8. To submit to Local Governments and Administrations a carefully digested annual report of their proceedings, and, in case of the outbreak of epidemic diseases, to forward early reports of all their proceedings.
9. To furnish the Imperial Sanitary Commissioner with copies of their reports, and generally to keep him informed on all matters of sanitary importance.

These appointments are yet of too recent date to show very great beneficial results. But several reports, already submitted by the Sanitary Commissioners, are an earnest of what may ultimately be effected; such, for instance, as Dr. B. Smith's account of the epidemic fever in the Hooghly District; Dr. Cutcliff's report on fever in the Meerut Division; and the mortality tables of the North-West Provinces.

Regarding the advisability of having sanitary officers in India, there can be no manner of doubt. But it is questionable if the separation of the sanitary officer from the administrative ranks

of the medical department was a wise and sound step. There are those who hold the opinion, that it would have been far more advantageous to the public good, had the sanitary office been combined with that of Deputy Inspector-General of Hospitals of the Indian Service, the number of the latter grade being of course increased, and their circles of superintendence diminished. At the present time, we have the Sanitary Commissioner with the Government of India, the local Sanitary Commissioners, and the medical authorities, all working independently, all calling for reports, all pursuing similar investigations, all travelling over the same ground,—a waste of strength which could not have been anticipated. It is true, a combination of the administrative, medical and sanitary officers, would have entailed extra expenditure under the former head, but at the same time, the cost of the latter would not have been added to the estimates. It is also true that such a combination would have limited the choice of sanitary officers to the Medical Service. But this, we submit, ought to be the case. Medicine and sanitation cannot be separated. The attempt to sanitize without medical acquirements must end in failure. Sanitation may of course be separated from the practice of physic—perhaps should be so; but it cannot be isolated from an acquaintance with the etiology and causation of disease, from physiology, chemistry, and medical climatology. And such knowledge is not obtained without special and prolonged education.

The report of the Royal Sanitary Commissioners shows that the average mortality of European soldiers in India, during the first-half of the present century, was 69 per 1,000 of strength. But the same report also demonstrates that there was, during the period named, a gradual diminution in the death-ratio. While during the first quarter of the century the mortality was considerably above 96 per 1,000, during the second quarter it fell much below that figure. In the Bengal Army the death-ratio during the 12 years ending 1853-54 was 20 in the 1,000 lower than that prevailing in the 12 years ending 1821. In Madras, the deaths diminished one-half from the commencement of 1800 to the end of 1852. In Bombay, the death-rate for the decennial period ending 1856 did not exceed 10 per 1,000 per annum. For the 15 years, ending 1856, the mortality for the whole of India was not more than 51 per 1,000. And this, it must be recollected, was before what may be called the sanitary era in India. For

the same period the rate of invaliding averaged 29 per 1,000; the total loss to the service, therefore, from sickness being some 80 per 1,000. For the six years ending 1867, the mortality among soldiers for the whole of India was 26·55, and the invaliding 48·70, the total loss to the service, therefore, being 75·25. The difference between these last figures, namely, 75·25, and the total for former years, namely, 80, or about 5 per 1,000, must represent the total gain of the last few years. Unquestionably, the mortality has been considerably reduced, but, in exact ratio to this diminution, there has been an increase in the number of men invalided. Had not the invaliding list risen from 29 to 48 per 1,000, it is more than probable the death-rate would have remained at the old figures. And this in spite of all our sanitary endeavours. The reflection that such is the fact may be humiliating to sanitarians, but it is none the less a fact, and cannot be ignored. It would appear that whatever endeavours we make, a certain penalty of sickness and death, or of invaliding and death, must be paid by the British Army of occupation in India. And that this is so, is signally proved by the fact that the death-rate of the women and children, who are seldom if ever invalided, has not at all lessened. As it was in years gone by, so it is now. European women, in their capacity of soldiers' wives, still die at the rate of 46 per 1,000; while children inhabiting barracks maintain the mortality of some 80 per 1,000. Now, it is unquestionable that, had our sanitation lessened the death-ratio of the men, it must have produced similar effects on the women and children living under the improved hygienic conditions. But such has *not* been the case. The mortality of these classes remains much the same—for they are not invalided.

The gain of some 5 per cent. in the mortality rate of the men, may be, in a great measure, attributed to the Short Enlistment Act. Soldiers do not now remain so long in the country. Enlisting for 10 years, some portion of that period is always served before they place foot in India. And at the termination of the period, very few now volunteer to remain in the country. Length of residence always tells upon health and vital statistics, and somewhat of the diminished death-ratio must be attributed to this cause alone. Again, we have the prevalence of better habits of life, and a change of medical practice from the depleting system of former times; both causes tending to the prolongation of European existence in India. The benefit, therefore, directly attributable to sanitary reforms is small indeed!

Such considerations naturally lead to the questions,—Is sanitation therefore a myth? Or are we sanitating in the right direction? Certainly sanitation is no myth. But the best of hygienic measures will not change the climate. So long as the European is exposed to the tropical sun, the monsoon deluge with its malarious results, and the tendency to congestion of internal organs consequent on the cold weather, sickness must result; and this, notwithstanding the greatest care, and the most magnificent buildings as residences. The great majority of men invalided are sent home for malarious atrophy following fever, and the frequent degeneration into such condition is inseparable from residence on the plains of India. The remedy is the removal of the men into a climate more resembling that of their native land; or, in other words, by the more systematic use of hill stations. It is only by such sanitary measures that we can hope to diminish the death-ratio, without increasing the invaliding list.

It is a curious fact that, until the period of the Crimean war, very little attention had been paid to the construction of barracks or hospitals, either civil or military. We believe we are correct in stating that ten years back no book existed in which the subject had been treated. Hospitals were built without any recognized principles of guidance, and any long barn-like building, capable of affording shelter to a number of men, was esteemed fit for a barrack. Now, matters in this respect have altogether altered, and the tendency is towards over-elaboration of detail, and massiveness of structure. As will be mentioned in the proper place, there are reasons for the opinion that the palatial barracks now being built, are mistakes. And with regard to hospitals, we cannot but recollect the remark of an old army surgeon of the last century, Robert Jackson, that he would rather treat his patients behind hedgerows, than in the finest building where fresh air was not constantly obtainable.

Colonel Crommelin having been specially appointed to consider and report on the numerous important questions involved in the construction of barracks and hospitals for European troops, submitted a report in 1866. This having been referred to local governments and sanitary authorities, the Supreme Government passed the following conclusions as the basis of a standard plan. But the impossibility of determining on one, or even several standard plans, to meet the varied circumstances of locality and climate found in India, was acknowledged. Therefore deviation

from the general plans laid down is permitted, when necessary, for peculiar local reasons.

1. Barracks should be of moderate size, as admitting of better sub-division of the men, and more efficient ventilation than either larger or smaller buildings. For infantry, half-company barracks should be built; for batteries, one or two barracks, as site and other circumstances render most desirable.

2. Each barrack should contain rooms capable of holding from sixteen to twenty-four men.

3. Barracks, except at hill stations, should be upper-storied, allowing 90 superficial and 1,800 cubic feet per man.

4. Married quarters should consist of two apartments, 16×14 feet, and grouped in blocks; as a general rule, being single storied.

5. For hospitals, the component parts, as wards for sick and convalescents and the different offices, are laid down with great minuteness, the space required being as much as 120 superficial and 2,400 cubic feet per man. For native troops the hospital accommodation required is much less elaborate.

It is understood that barracks and hospitals, according to Colonel Crommelin's plan, as modified by Government, are to be erected at every station. Those who are aware of the old structures will at once appreciate the immense changes thus introduced, and admit the excessive attention which has been bestowed on the subject of late.

Various matters, affecting the internal economy of military life, have been considered during the decade under review. In 1861 a report was called for from medical officers in the Bombay Presidency, regarding the relative merits of coir and straw mattresses. In 1862, wooden gratings for the men to stand on when washing, were ordered for all barracks, &c. A committee was also appointed to enquire into the system of rationing, and a series of orders, not unrequired, were published regarding barrack cookery. In 1863, new rules for the supplies of *tatties* were issued. Attention was also directed to cork mattresses, particularly for marching, which, Sir Ranald Martin states, are less absorbent, and do not engender putrefaction like cotton, wool, flax, &c. Being light, a slow conductor of heat, and when cut into small flakes, and placed in a cover, free from lumps, cork would appear well adapted for the purpose. Horse-hair also is a good stuffing, but scarcely procurable in sufficient quantity. In 1865, G. O. C. No. 278, 16th March 1865, calls

attention to the better provision of filters in barracks. And No. 35 of 1865 revises canteen rules, fixing the daily amount of liquor issued at one dram of rum, and one quart of malt liquor. A committee was also appointed at Roorkee to take into consideration the best method for cooling and ventilating barracks and other public buildings. Reports as to the best system of ventilation were also called for from various officers. A patent self-acting punkah, devised by the Rev. Mr. Calderwood, was tried; in 1866, another by Mr. Saintyves, and a thermantidote machine by Mr. Livingstone. But it is believed that a cheap self-acting punkah, not liable to get out of order, is still a desideratum. In 1867, Mr. Turner proposed a new kind of exhausting fan for the ventilation of barracks. In 1869, Government issued an order directing that, when considered necessary by the medical officer, *tatties* should be used at night in barracks, hospitals, and cells, whenever at 9 p.m. the thermometer indicates a temperature of, or in excess of, 95F., provided the wind is not from the east, when *tatties* can have no good effect, as then the air is already too moist to permit evaporation. And the systematic enforcement of this boon will doubtless do much to prevent those epidemic attacks of heat asphyxia, from which from time to time so much mortality has occurred. In 1861, a great step towards the comfort of clerks and other public employés was taken, in allowing *khus-khus tatties* for the Supreme Court and other public offices.

Whether considered with reference to the health, or comfort of European officials, particularly military officers in India, there are few subjects of greater importance than the dwellings they inhabit. In this country, the opportunities of out-door life for the European, are, during the hot season and monsoon rains, reduced to a minimum. So much time is necessarily spent in-doors, that a structure, capable of affording protection from the weather, is most important. But unfortunately, the "bungalows" in which the great majority of European military officers live, are most inferior buildings. Small, covered with a leaky and too often rotting thatch, supported by walls of mud which become inordinately damp during the rainy season; frequently level as regards flooring with the surface of the ground (the floor itself sometimes nothing more than the ground), an Indian subaltern's "bungalow" is generally inferior to a moderately provided stable at home. Neither are many of the houses of the higher grades of officers very much superior.

And to this state of things many causes combine ; actual inability to devote any sufficient sum of money to the purpose, frequent change consequent on military life, the fact of houses being often the property of natives, who have neither the inclination nor knowledge how to render them better adapted to the wants of Europeans,—all combine to render the bungalows in British cantonments the melancholy depressing sights they now appear.

The desirability of remedying the present state of matters, by Government providing quarters for its officers, has often been mooted. And with reference to this subject, the army owes a debt of gratitude to Sir William Mansfield, who has strenuously endeavoured to provide a remedy for the evil. When Commander-in-Chief of the Bombay Army, His Excellency submitted certain proposals to the Bombay Government, regarding the tenure of house and other property in military cantonments, which unfortunately did not meet with the approval of Sir Bartle Frere. It was suggested that, with the exception of lines or isolated houses required for Staff or Regimental officers' barracks, parade grounds, jails, &c., all portions of military cantonments, should be handed over to the civil authorities, and all unoccupied land in the neighbourhood sold ; the office of Cantonment Magistrate being abolished. With money thus realized, or saved, His Excellency proposed eventually to purchase all officers' bungalows, so that in time the State would become the landlord of the whole of the military. The position would in fact be that which obtains at home, bungalows being substituted for barracks ; while, as at home, for offences not purely military, justice would be administered by the civil authorities in place of the Cantonment Magistrate. Shortly after His Excellency's transfer to Bengal, a further memorandum appeared "on the question of providing quarters by the State for officers." It is here mentioned that His Excellency has, at different times, given a great deal of thought to the subject of lodging officers in India, "and is moreover convinced of the necessity of Government undertaking the task." Attached to the memorandum were sketch plans of accommodation thought desirable, which, at a moderate rental, would return 5 per cent. interest. Experimental measures were sanctioned at Allahabad, Morar and Nowgong, but the suggestions, admirable as they were, have not been generally acted upon. Neither would it appear that any intention existed of so doing. For in 1867 Government in the Military Department sanctioned the grant of a loan, according to rank and

pay, to all officers desirous of building better residences. The loan was to be paid back without interest, by instalments. But the order granting the privilege has since been rescinded. And in reality the abrogation is not any vital loss to the interests of military officers. As was observed on the subject,—“A loan without interest for such a purpose may sound “liberal enough, but when it is remembered how much money “must be frittered away in a first attempt to build, or in contract- “ing for the building of a house, the money is dearly enough “paid for in the end, while from the Government point of view “the houses thus built are not such as are of advantage to a “cantonment.”

The cantonment regulations in India have been devised with the endeavour to please two parties, *viz.*, both the landlords and the tenants of the bungalows. But, as usual with such attempts, the result has been a failure. The landlord, it is true, is protected against loss by courts of requests, and there is probably no money more surely and regularly paid than house-rent in India. On the other hand, the civilian owner of a bungalow in military cantonments is not permitted to do exactly what he likes with his own. The rent is fixed by a committee, generally it must be confessed at a fair remunerative rate, but the owner cannot raise it if he finds one willing to give a higher price. Neither can he live in his house himself, if it be required by an officer belonging to the brigade.

Yet notwithstanding all these regulations, it annually becomes more difficult for officers to procure even fair house accommodation, and unless some other inducement, than now exists, be given to cause capitalists to lay out money upon such property, no improvement will take place. And such inducement cannot proceed from a rise in the rental, the funds of the large majority of military men not permitting it. The alternative is, that eventually Government must become the landlord. And the sooner this is determined, the quicker will officers be lodged in healthy and suitable residences, which at present the great majority are not.

In 1861 regulations for a much required institution in the shape of an Officers' Hospital in Calcutta were published. An officers' hospital was not by any means a new idea, for in 1787, Mr. Dick, Assistant Surgeon in the Company's Service, proposed a two-storied house as a hospital, the upper flats to be occupied by sick or insane officers, the lower by sick soldiers, and the Governor-General in Council approved of the

proposition, and directed the Board of Revenue to select a spot of waste ground on which a house might be erected. In 1863, the old *Bentinck*, formerly a P. & O. vessel, was converted into a floating invalid depôt on the Hooghly. Both these establishments were, however, afterwards abolished, and there is no such institution in any of the three Presidencies.

The desirability of an officers' hospital cannot be questioned. Numbers of sick officers monthly arrive in the presidency towns, recommended for furlough to Europe by mofussil medical men, who, in a weakened, debilitated, or even perfectly disabled condition, are entirely dependent on either expensive hotels, which they can ill afford, or on the charity of friends, which delicacy forbids many to accept, even if offered.

For many years previous to the commencement of the decade under review, venereal disease in the British Army of India averaged 220 admissions per 1,000 of strength, and until recent periods there is evidence that the figures scarcely declined. Indeed, following the arrival of a large number of Europeans into the country, consequent on the mutinies, there was a very large increase in this class of disorders. So late as 1866, it may be seen from the "Army Sanitary and Statistical Report," that enthetic maladies supplied exactly the figure first mentioned towards the sum total of disease in India. There is, however, evidence of a diminution of syphilis in at least some parts of India. Thus in the Bengal Presidency, the ratio sank gradually from 250 per 1,000 in 1864 to 166 per 1,000 in 1867. It was not, however, until 1866 that rules for the prevention of venereal disease were *re-introduced* into Bengal military stations. The word *re-introduced* is used, because hospitals for the reception and cure of diseased women were established in Indian military stations in 1759, but abolished in 1830 by Lord William Bentinck. An outcry was raised against them on account of their presumed demoralizing tendencies, some even arguing that, instead of removing, they increased the evil! It is true, some of these lock-hospitals do not appear to have been properly conducted, and petty officials connected with them seem to have taken undue advantage of their position—consequences which under better regulations are, it is hoped, avoided.

The question of the morality of measures for the prevention of venereal disease, entailing the sanction of prostitution, is one on which there will always exist a difference of opinion. It

was probably this feeling which induced the Royal Sanitary Commissioners, in 1863, to accord special prominence to the fact that, after mature consideration of the various plans adopted in different countries, "we have arrived at the conclusion that none are so likely to diminish this great scourge of the soldier in India, as the re-organization of the measures formerly adopted in the three Presidencies, with any improvements which subsequent experience may point out as being required to meet the necessities of each locality."

The Commissioners also recommend additional means of cleanliness to be provided in all barrack lavatories, and also improved means of occupation, instruction, and recreation.

With reference to this subject, the following is quoted from Moore's *Health in the Tropics*, published in 1862. "It is a very general idea among soldiers, and indeed among those occupying a higher position in the social scale, that venereal disease, especially in its primary form, is easily and quickly cured. The sooner people are undeceived on this point, the better it will be for public health and morals, and the less likely will individuals be to incur danger The period has arrived when a false modesty should be avoided. The subject of syphilis should be explained to the soldier by the medical officer, and as at the present period the probability of non-contact is *nil*, prophylactic measures, as cleanliness, should be enjoined."

It has already been mentioned that lock hospitals were re-introduced into Bengal in 1866. Shortly afterwards an Act for the prevention of contagious diseases, making provision for lock hospitals in Madras and Bombay, was also passed. And Act XXVI of 1868 also enables municipalities to provide lock hospitals. At the present period, lock hospitals, entailing supervision over prostitutes, exist in all Indian military cantonments. We may, therefore, expect a diminution of venereal disease, although a total freedom from its ravages can scarcely be looked for. The higher means of preventing it, *viz.*, the elevation of the moral character of the soldier, the diminution of intemperance and its consequences, the employment of the European soldier and the encouragement of marriage, are doubtless most important. But they require a greater expenditure than the State revenue can afford, no less than a change in the habits, ideas and feelings of the soldier, which the present generation at least is not likely to see. For the prevention of syphilis we are therefore dependent on the lower means indicated.

The instruction, occupation and amusement of soldiers has received great attention. In 1860, the institution of the Outram Institute at Dum Dum was proposed. In 1861, rules regarding soldiers' gardens were published. In 1864, gardens were classed under two heads, small plots near the barracks, and larger ones at a distance. Sites, it was ordered, were to be selected by boards of health: the cost of first turning up and enclosing the ground to be paid by the Commissariat Department. The P.W.D. to make provisions for water supply, by a well for each company, or an aqueduct. Wheels and ropes for wells to be found by Government. Tools to be found by the Barrack Department, but to be repaired from the garden fund. Reading Rooms have at various times been erected in proximity to all European barracks. Skittle or Bowling Alleys, Fives Courts, and other means of recreation, have also been liberally provided, especially since the publication in 1863 of the Report of the Royal Commission appointed to enquire into the health of the Army in India. On the subject of occupation and amusement, the Royal Commissioners observe: "The men's amusements, such as they are, are all connected more or less with drink, and they are everywhere most deficient in amount." Hence workshops, soldiers' gardens, gymnasia, libraries, reading rooms and theatres are recommended. To quote the orders since issued on these different subjects would be tedious, but similar attention to that noted under the head of gardens, has been accorded to other measures. Hence such a scene as that depicted, as the daily means of occupation and amusement of Anglo-Indian soldiers, by the pen of Miss Nightingale and published at page 358 of the Royal Sanitary Commissioners' Report, need never now be repeated. Here we have the men represented as lying on their beds, in every state of listless indolence, smoking, sleeping, card-playing, wrangling, drinking, bartering, yawning. We do not mean to say that this is never the condition of an Indian barrack interior now, but we assert, that such need not be the case, that plenty of rational amusement and occupation is now provided for the men, and that the account of a soldier's day in India need not now be "bed till day-break—drill for an hour"—breakfast served to him by native servants—bed—dinner served to him by native servants—bed—tea served to him by native servants,—drink—bed—*da capo*." A certain amount of ennui, the consequence of climate and heat, is perhaps

inseparable from hot weather existence. But it is the soldiers' fault, and not that of the authorities, if this is not reduced to a *minimum*.

The employment of soldiers in different out-door trades has often been suggested, but unless in the hills, climate will ever forbid this means of occupation in India. In the hills, however, it is different. There Europeans may labour at out-door work to a very considerable extent. In 1867 during the hot season, 648 men of the 3rd Battalion Rifles were employed on the Murree and Abbotabad road. The total expenditure, including hutting the men and commissariat, was Rs. 77,208, and the value of the work done Rs. 59,043. But, as Colonel Maclagan stated, "the gain in health and welfare of the men has a money value much higher than the expense here shown to be caused to Government, independently of other great advantages attending the arrangement." The men were happy, enjoyed the life, and also benefited pecuniarily. They acquired habits of steady continuous exertion by wholesome employment in a bracing climate. They returned to their regimental duty in good health and strength, with acquired skill and practice in the use of tools which it is desirable all soldiers should be able to use. The Government of India considered the results highly satisfactory, and expressed an opinion that re-employment of the men on similar duty was highly desirable.*

The mortality among soldiers' wives and children has already been referred to, and the reasons of the continued large death-ratio pointed out. But during the decade, much has been done to ameliorate the condition of these classes. In 1861, it was ordered, that soldiers' children accompanying their step-fathers to England, should be permitted the usual orphan allowance if returning to India. In 1865, half rations were ordered for the orphans or widows of soldiers on staff employ, for the period to which children of private soldiers are so entitled. In the same year, quarter rations were admitted to children separated from their fathers, the latter proceeding on service or as invalids to hill stations, or the former being sent to a convalescent depot.† Afterwards it was ordered that whenever the exigencies of the public service required the separation of a man from his family, half and quarter rations should be issued to the women and children

* Supplement to the *Gazette of India*, p. 430.

† Governor-General's Order No. 604 of 1865, Military Department.

respectively.* The "subsistence allowance" granted to both women and children has also been almost doubled.

In 1860, the necessity for some better arrangement for the transport of troops was forcibly brought to notice by the melancholy voyage of the "*Great Tasmania*." This vessel, upwards of 2,000 tons burden, had been previously taken up by Government as a transport ship during the Crimean war, and was engaged by the Indian Government in 1859, when 1,000 men belonging to the 5th Bengal Europeans, 3rd Madras Europeans and 3rd Bengal Europeans, were embarked for conveyance to England. They were 154 days at sea, during which time 101 men died. The investigation of this mortality showed,—that the men were somewhat demoralized by absence of the necessary discipline; that proper care had not been exercised with regard to the supply of "kits" and bedding for the voyage; that overcrowding had existed on account of the insubordination of the men, and their refusal to go on deck; that the 5th Bengal Europeans had previously been tainted by scurvy; that the bread being stowed in iron tanks, had become damp and mouldy; and that the preserved meat and vegetable supply, as also the water supply, was deficient.

But the Indian Government was not long destined to depend on hired transports for the ordinary relief of European soldiers. After considerable opposition, the idea that a voyage round the Cape was a necessary acclimatising process for the European soldier exploded. The mutinies did much to dispel this long fixed theory, and the writings of various medical officers aided in the work. Moreover, economical considerations were also brought forward. It was stated, that instead of soldiers being three months *en route* to India and therefore useless, they might reach this country in one month, and thus two months' service be saved. Eventually, the construction of the present transport fleet was decided upon. The utility of these magnificent vessels, and the great use they must prove in quickly conveying the invalid from the tropics to a temperate climate, needs no dilation here. It is however stated that the system of discipline on board is too much after the man-of-war fashion for a transport service: and soldiers leaving at least one of the vessels, are said to have *groaned* rather than *cheered* on their liberation.

No subject, during the last ten years, has deservedly received more attention than the prevention of cholera, and although we

* Governor-General's Order No. 857 of 1865, Military Department.

have not yet succeeded in stamping out the disease, there is at least hope for the future from the results of recent procedure and investigation. The first action with regard to cholera, during the period under review, was taken in 1861, in the appointment of a Commission * "to enquire into, and report on, the "recent severe outbreak among the European soldiers at several "stations in the North-West Provinces." During the whole of the hot season of 1861, cholera prevailed from Benares and Allahabad on the east, to the deserts of Rajpootana on the west, from a few miles north of Neemuch on the south, to Ferozpour, Umritsir and Lahore on the north, scarcely a military station, city or village escaping a more or less severe visitation. It was, however, at Meean Meer that the disease proved most fatal, apparently localised by the cesspools, the crowded barracks, and the condition of the water, which was said to be tainted by the sewage. It was, however, long before the Commission of Enquiry published a report, although to their investigations and recorded opinions, is supposed to be chiefly due the appearance, in 1862, of Sir Hugh Rose's celebrated order, dated April 2nd. And this may be considered the most important step towards the prevention of cholera yet taken in India. The communicability of the disease, the tainting of grounds and buildings by the active principle of the malady, was authoritatively recognised, and *ordered* to be acted upon. The danger of permitting large bodies of men to remain breathing a cholera atmosphere in a too often crowded or indifferently ventilated dwelling was admitted, and the orders were given *to move out into camp* whenever epidemic cholera occurred. The most important paragraphs of this famous order run as follows :—

"4. As soon as any case of cholera is reported in the station, "the troops will be moved into camp, and no unfavourable condition of the weather is to prevent this movement being carried "out.

"5. The force will be broken up into as many detachments "as the number of the medical officers will admit, allowing "one to each party.

"8. It must be insisted on, that all discharges from the "stomach and bowels of the sick be instantly removed and "buried in pits.

* This Commission consisted of— Mr. Strachey, *President*.
 Dr. Linton, C.B., Insp. Gen. of Hospitals, B. F.
 Dr. McClelland, Insp. Gen. of Hospitals, L. P.
 Lt.-Col. Gawler, Offg. Dep. A. G., B. F.
 Major Stewart, Bengal Engineers.

"10. Should cholera follow the troops, they will be moved short distances, at right angles if possible to the wind and track of the disease.

"11. The breaking out of cholera in a regiment or station, is on no account to cause the suspension of the soldiers daily amusements or occupations.

"12. The troops are not to return to cantonments until all traces of the cholera shall have disappeared."

But notwithstanding the unmistakeable language in which the above regulations are given, and notwithstanding the arguments upon which the necessity of movement are based, much disposition of evasion and cavil was displayed. It was hinted, that the famous order was simply "clap trap" for home consumption, as a sop to the party clamouring for sanitary reform, and that obedience was not intended. "Departments" hated the trouble entailed by moving European troops. Commissariat officers cried out about the difficulties of supplies and carriage, in which they were ably supported by civil officers, who were of course applied to in emergencies. The latter were not slow to show the hardship entailed on poor cultivators, obliged to bring out their carts and bullocks at perhaps the very period their fields required most attention. Doctors prophesied a greater mortality from sun-stroke and fever and dysentery, than from the cholera if left alone. Officers naturally did not admire the prospect of going under canvas during the rains or hot weather, and having the additional expense of maintaining carriage for an unlimited period.* In short, objections, both grave and trivial, were glibly advanced, and the majority, ignorant of the facts, arguments, and conclusions on which the order was based, regarded the procedure as simply a "sanitary vagary." Even the authorities in the Bombay Presidency did not adopt Sir Hugh Rose's regulations in their entirety. The Commander-in-Chief, with the sanction of Government, was pleased to publish a modified order, † requiring telegraphic reports on the appearance of cholera, on which, if considered necessary, orders for the march would be issued from Headquarters; but, generally, "this is not to take place without authority from the Head-Quarters of the Army." Happily,

* It is only right to mention that a cholera camp entails many expenses on the officers, who must keep up an expensive carriage in the way of camels or carts during the whole time, perhaps months, they remain under canvas, and for which no extra allowance is granted.

†. G. O. C., No. 774, 5th July 1862.

however, no material alteration in the original rules was permitted; although modified from time to time, the principles involved, *viz.*, the communicability of the disease, and the necessity of separation and isolation of the sick were maintained, and the resulting benefits will presently be seen.

Another fruit of the cholera epidemic of 1861, was a report by Dr. Playfair on the epidemic cholera which appeared in the Agra Central Prison. In this paper, the author states that "cholera, if seen in an early stage and promptly treated, is generally under control." His great remedy is a revival of the bleeding practice of Twining, Annesley, and other older authors.

In 1863, we were favoured with a report by Dr. Murray, then Deputy Inspector-General of Hospitals, "on the attack of epidemic cholera in Agra of that year," in which the movements of troops were carried out under his superintendence. The artillery detachment moved out, and, crossing the river, after several changes of ground, entirely lost the cholera. The same result occurred to two detachments of the 23rd Fusiliers. Dr. Murray in this paper lays down the general rules of prevention as under:—

1. Separation of the affected.
2. Removal of the healthy from contaminated ground.
3. The early exhibition of remedies, with quinine in the rainy season.
4. The use of disinfectants, particularly newly made charcoal in the shape of smoke.
5. Strict attention to diet, cleanliness and ventilation.
6. The employment of native *shampooers* to wait on the sick.

This year also saw, long after the dissolution of the Commission appointed in 1861, the publication of the second and third sections of their report, with a preface by Mr. Strachey, who accounts for the delay by differences of opinion existing among the members. "These differences relate almost entirely to matters affecting individual officers; the questions at issue had no importance or interest for the public, and their discussion at the present time could throw no light upon the progress or character of the epidemic. It has, therefore, been thought undesirable to publish the first section of the report." The second section contains accounts of the progress of the disease at various stations, together with details of sanitary defects. The third, and most important portion,

contains "special measures for the prevention of cholera among "European troops," which afterwards, having been slightly modified by the Bengal Sanitary Commission, were republished in a separate form, and must now be regarded as the manual for the guidance of all officers during epidemics of cholera. It is herein insisted that, although general sanitary measures are most important, extraordinary precautions are required, and that observation of facts is the sole rational basis for measures of precaution. Civil authorities are made responsible for giving the earliest information of the prevalence of epidemic cholera to the Commandants of military stations. Communication with infected localities is to be prevented, encamping grounds to be chosen, but when in the vicinity of any station suitable buildings exist, they are to be occupied in preference to the location of the men in tents. But the most important modification of the order of 1862 is contained in paragraph 481, which runs as follows:—"All, therefore, which "need be laid down as an invariable rule is, that the particular "body of men among whom cholera has appeared in an epidemic form, must be removed from the cantonments. If, for "example, this body consist only of the inmates of some one "building, the measure need only be applied to them; if some "particular company or troop be attacked, it will be similarly "dealt with. A whole regiment, or the whole of the troops "at the station, need only be sent into camp, when it is found "that the measures adopted have not stopped the progress of "the disease, or there is reason to fear they will be insufficient."

But in carrying out the movement of troops, considerable discretion is to be allowed to local authorities. Less than the precaution described must not be taken, but when considered essential, the movement is to be extended. Cots are to be taken into camp, marches to be short, and similar rules to apply to women and children. Thus, while maintaining fully the principle of isolation and separation of the sick, and removal from affected localities, the amount of trouble and expenditure is reduced to a *minimum*, by merely insisting on the evacuation of those buildings in which cholera actually occurs. But a foot-note to paragraph 481 runs:—"For the word building, substitute room or "building"; and had this been adopted in the subsequent standing orders it would undoubtedly have been a retrograde step. Whenever cholera occurs in any building, particularly in one occupied by large numbers, the whole should be evacuated, and only re-occupied after thorough disinfection and purification. Walls, floors,

and punkahs, should be scraped and white washed ; wood-work should be re-painted ; furniture, punkah fringes and ropes washed. G. G. O., Military Department, dated 1st September 1864, to the Adjutant General of the Army, notifies the approval by the Government of India of the measures epitomised above for the prevention of cholera. It was, moreover, pointed out that, in selecting the sites for cholera camps, the ground should be visited during the rainy season, as the real suitability of any spot for the purpose can only then be decided,—a remark equally applicable to the selection of sites for cantonments, barracks, houses, or any other purpose.

Attached to the "Measures for the prevention of cholera" is a memorandum on its propagation and prevention by Dr. W. Budd, based on the contagious nature of the choleraic discharges. Isolation of the sick, and the destruction by chemical agents of the excretions, are the main points insisted upon.

In June 1863, Mr. Walker, Inspector-General of Prisons, North-Western Provinces, issued a well written circular,* laying down rules for the prevention of the spread of certain maladies in prisons. Relief of the jail from any excess of numbers is insisted upon as the primary step. Having got the prisoners out in camp, "insist on their performing some work, in small bodies at a time if your guard is insufficient, but avoid the error of leaving them day and night lying in tents, tied up on the belchain." If circumstances should prevent the removal of the prisoners, they are to be exercised in the open air every day. A section should be organized for night work, and crowding the hospital should be avoided by the discharge or removal of miscellaneous patients.

But the difficulty of procuring carriage for the removal of troops, on the sudden appearance of cholera being still felt, a standing order was published in 1864 (P. W. D.), permitting the hiring of buildings for the accommodation of troops on any emergency of the kind.

In October 1864, Inspector-General Dr. Murray published a circular, requesting information from medical officers regarding their experience on various points connected with the history and etiology of cholera. The intervals at which cholera appears at stations ; the course of the disease ; the period the disease remains dormant ; the effect of moving into camp and the subsequent effect on the health of the troops, were among the more important questions asked.

* Vide Supplement, *Calcutta Gazette*, p. 2433.

The year 1865 was rendered memorable by what was not inaptly called "The fatal march from Mhow." In April of that year, a company of artillery left the station named for Bombay, but near the Smirole Ghât, cholera in its worst form attacked the detachment, and its return was necessitated. Cholera at the time existed in the villages *en route*; the season was far advanced; the men, it was said, were depressed by the knowledge that their battery (one of the old Company's) was about to be broken up; and undoubtedly the parting glass had been taken more freely than perhaps is usual, and the soldiers were thus in a condition favourable to the reception and development of the malady, which unfortunately proved so fatal.

In 1866, we find the following order* issued under the sanction of the Bombay authorities:—"When it is found necessary on account of epidemic cholera to remove either troops or prisoners from the building which they have occupied to tents, the cholera patients should be encamped separately from all others, and when it is necessary to change ground, because fresh cases of the disease have occurred, the cholera patients should on no account be taken with the others to the new ground. The cholera patients, so left, should be conveyed to the cholera hospital tents, and not to a general encampment."

In August and September 1866, the subject of cholera was brought before a meeting of medical officers at Simla, Dr. Murray taking the leading part in its discussion.† Every hypothesis connected with the symptoms, treatment and prevention of the malady was considered *seriatim*, and the following positions received general assent:—1. The existence of a specific poison. 2. The variation of the symptoms with the intensity or quantity of the poison. 3. That the poison is of an increasing or propagating nature. 4. That the poison, being a foreign body must enter or be communicated to the system. 5. That the poison passes off with the evacuations. 6. And with the breath. 7. That the poison retains vitality for some time after leaving the system. 8. That the period during which vitality remains, is not known. 9. That cholera follows human intercourse on the line of commerce, and its arrival is often distinctly individualized. 10. That the season of localities regulates reproduction of the poison. (Thus the natural season appears to be in Calcutta, March and April; in Agra and the North-

* No. 94, G. G. O., 9th February 1864.

† The Simla Conference was not official, but assembled at the request of Dr. Murray.

West Provinces, June, July, August; in Lahore and the Punjab, August and September; in Mecca and Egypt, June and July; in France, autumn and winter; in England, summer and autumn.) 11. That crowds, whether in cities, fairs or otherwise, are favourable to the development of the activity of the poison. 12. That cholera frequently follows or accompanies famine. 13. That although soil retains the poison in a productive form, it will increase independently of land, as, for instance, on board ship. 14. That the human body is the ordinary channel by which it is disseminated. 15. That it may be conveyed in clothing.

With regard to moving troops, the following rules were generally agreed to by the members of the Simla Medical Conference:—

“It is important to determine the *time* for moving into camp. The *longer* the troops remain in cantonments after the disease has shown itself, the *more extensively* are the men *affected*, and the more likely they are to carry the disease into camp. It is not desirable to entail the trouble, expense, and exposure needlessly; but it must be recollected that *dealy is dangerous*.

“If the epidemic be *approaching* the place; if it be *pre-sent in the neighbouring native city*—if *one case* appear at the *usual season* in the hospital or barracks, where it had been present the *previous year*; or should diarrhœa become prevalent at this time—*preparations* should be made to facilitate the movement into camp, and *enquiries* made regarding the supply of carriage, cots, &c.

“Should these *suspicious circumstances* become more strongly developed, the *pretiminary camp* for two hundred men should be pitched.

“Should *two decided cases of collapse* appear, when the diarrhœa is prevailing, the companies to which these cases belong, should be *moved* that day, into the preliminary camp; and two or three days after, should the *diarrhœa continue* in the regiment, the two or three companies most affected should be moved out.

“This is a *medical question*, and the responsibility of the movement should rest with the senior medical officer at the station; as regimental authorities may be biased, and it is through that channel that distant authorities receive information.

“The Deputy Inspector-General of Hospitals should be in the station at an early period, if not already there; and on him should rest the responsibility of the *change to camp and the return* to cantonments when the attack is over.”

In 1866, Drs. Stewart, Goodeve and Dickson, the British Commissioners appointed to attend the Cholera "Commission Plénière," opened at Constantinople in February of that year,* communicated the conclusions arrived at to Lord Clarendon, by whom they were sent to the Government of India. Briefly, the results of the deliberations of the Constantinople Cholera Commission were as follows :—

That the discharges of those in a state of developed cholera, or in a state of choleraic diarrhœa, become the chief means by which the cholera poison escapes from the system, and by mingling with food or water diffuses the disease.

That cholera may be transmitted by exposing persons to the atmosphere of buildings or vessels, which have been occupied by cholera patients, or to the emanations from clothes, bedding, or other articles, which have been in contact with diseased individuals, or soiled by discharges.

That exposure to atmospheric air lessens the force of the contagious matter, and *vice versa*.

That there is no reason to suppose that cholera is communicable by actual contact.

That the period of incubation, counting from the time of reception of the poison, is short. It may manifest itself either by fully developed cholera, or by diarrhœa with more or less choleraic symptoms. Difference of opinion exists with regard to the actual period—the majority of the Commission thinking that after diarrhœa has lasted eight days, the case may be removed from the class of cholera patients.

On the above conclusions, the British Cholera Commissioners suggest the following measures in case of ships arriving from infected places :—

1. No persons to be allowed to land, previous to efficient inspection by medical officers.

2. The healthy passengers to be removed from the ship and isolated for a period of five days, at the end of which time they should be again inspected, and if found without choleraic symptoms receive *pratique*.

3. All persons with diarrhœa or cholera at the time of arrival, or at any period of the detention, to be isolated. Cases of diarrhœa to be retained under observation.

They further think that the complete disinfection of the

* The Report of the Commission—a volume of 900 pages—was not published till 1868.

effects of persons coming from contaminated places should be insisted upon.

In conclusion they repeat, that, whatever measures are undertaken, the communicability of the disease should be recognised; involving the necessity of complete isolation of all choleraic patients from healthy individuals, the destruction or disinfection of all wearing apparel that may have been in any way contaminated by the sick, the complete disinfection by chemical means of all discharges derived from them, the evacuation if possible of contaminated ships and habitations of all kinds, and their complete purification.

The year 1866 was further marked by a grand durbar at Agra, to which the chiefs of Rajputana, Central India, the Panjab, &c., with their miscellaneous following, marched long distances. For some months previously, isolated cases of cholera had occurred in various parts of Rajputana. The camp of the Agent Governor-General for Rajputana, in marching up from Aboo in the middle of September, took a circuitous route through the Marwar territory in order to avoid infected localities. This camp arrived at "Halena" near Bhurtpur, on the 27th October, where two cases of cholera occurred. The camp then divided, and marched to Agra in two divisions. On the 3rd November the Agent Governor-General, with his personal staff only, entered the Agra cantonment, but the next day the disease appeared both in this camp, and in the other division, left some miles behind at Buroonda. The disease subsequently obtained a footing amongst both European and native troops during the durbar, as well as among the native population of the city, and in the camps of the various native chiefs assembled at Agra. In the military camp, and in the city, the total deaths did not exceed 7 and 64 respectively, but the number dying from cholera, mostly among the followers of the native chiefs, could not be ascertained and never will be known. In the Marwar camp, for instance, some 8,000 people were all huddled together, either *sub Jove* or in very small tents or "pals." Here cholera was reported to prevail or not, as the prospect of the Marwar Chief obtaining a very high seat in the approaching assembly appeared promising or the reverse. When it was supposed His Highness would attain the highest seat, cholera was declared not to exist in the camp. When it was thought Marwar would be seated below Jeypore, or some other obnoxious princeling, cholera prevailed, and the propriety of leaving the place was discussed. Of course cholera

was present during the whole period, but the sufferers were not always brought forward. And all who know the condition of a native camp, without order or regularity, will readily admit the ease with which the sick might be secreted, in the recesses of tents, under heaps of clothing, hidden away in howdahs or in palkees, taken off to other localities, from any one not possessing full authority over the whole.

A full report of the arrangements for police, conservancy and sanitation, adopted at the great Hurdwar fair of 1867, was published at the time.* Owing to the mortality which had occurred from time to time at other similar large gatherings in various parts of India, and also to the Constantinople Cholera Conference having called attention to the generation or at least outbreak of cholera at such times, it was decided, with the full consent of the Lieutenant-Governor of the North-Western Provinces, that as far as conservancy and sanitation generally could avail, every means should be used to prevent disease. The great Hurdwar Fair of 1867 commenced on April 12th, and early in January of that year a meeting of officers connected with the irrigation and police departments was called, for the purpose of devising measures of protection and prevention. Arrangements were made to prevent over-crowding at the bathing places; to prevent different sections and castes of Hindus meeting on their way to or from the holy ghâts. Temporary bridges were established from the mainland to Roree island. Barricades, chains, and other means of protection for the bathers were erected, and a camping ground, 27 square miles in extent, was prepared for the reception of visitors and pilgrims. Some idea of the magnitude of the arrangements involved may be formed, when it is recollected that during the ten days the fair lasted, 2,855,966 people were at Hurdwar and that bands of *faqîrs*, mustering above 12,000 men each, with horses and elephants (one band having as many as fifteen of the latter animals), claimed the right of procession through the town of Hurdwar to the bathing places.

The sanitary control was invested in Dr. Cutcliff, who based his conservancy regulations on the dry earth principle. Refuse was buried in trenches, or burnt in furnaces. The cantonment being in blocks, latrines were constructed for the use of people occupying each division. An ordinary latrine occupied 60 by 20 yards of ground, and in this,

* *Gazette of India*, August 23, 1867.

trenches were dug, each visitor being required to use the dry earth himself. In some few localities, where rock or stone composed the surface, earth was procured for deodorization and the whole carted away. The furnaces for the consumption of garbage, were situated in such a direction that the smoke was carried away from the camp. Hospitals, with native doctors, were also established at various points. *Dooleys*, or rather *charpoys* on poles, were provided for the removal of the sick or wounded, and dead bodies were taken to the sacred burning ghât; a native medical subordinate being detached for the purpose of seeing thorough cremation carried out. In case of contagious disease, a special locality was pointed out for burning dead bodies on. Everything, in fact, which forethought could suggest, appears to have been adopted for the prevention of disease at Hurdwar.

The gathering of the multitude at Hurdwar is thus graphically told by the Inspector-General of the Medical Department, Dr. Murray, then Inspector-General of Hospitals, Upper Provinces.* "A mass of people nearly as numerous as the population of Scotland, converging from the whole Hindu world of Eastern Bengal, Southern India and Western Panjab, was located on a bare plain on the banks of the Ganges on the 12th April, 1867. On that day they performed their allotted ceremonies and then dispersed. The solid stream of pilgrims, on foot, in hackeries, or on camels, which flowed along the road past Murree (80 miles distant) for nearly a week, was like the crowd of a London street." There was a story in circulation, that this would be the last of the great Hurdwar fairs, as the place had lost its sacred character from the Ganges having been diverted into the Ganges Irrigation Canal. The health of the crowd remained remarkably good up to the 11th of April. Previous to the 12th, there was no sickness. Neither had cholera occurred at Hurdwar since 1857. The whole country was indeed perhaps more than ordinarily free from the disease. But after the bathing on the 12th, cholera broke out, the commencement of the disease being thus described by Dr. Cutcliff:—

"In March, the temperature had been unusually high, and the weather then remained fine and pleasant up to the 11th of April, which was a cloudy close day, with the usual wind blowing upwards to the hills,—till the afternoon, when a heavy storm

* Report on the Hurdwar Cholera of 1867, *Gazette of India*, November 1867.

“ of thunder and lightning coming from the West broke over
“ Hurdwar, where two men were killed by the electric fluid,
“ and four others severely burned. Heavy rain fell, and conti-
“ nued all night. The 12th was the great day for bathing, and
“ the pilgrims who had been wet for twelve hours, began before
“ the dawn of day, to stream off in thousands to the sacred ghât.
“ The rain continued to fall, though now only lightly : nor did
“ it cease till the evening, when just before sunset the clouds
“ broke, and the sun for a short time appeared. But the
“ pilgrims had been out for 24 hours, and after bathing in and
“ drinking the much polluted water at the ghât, a vast number
“ must have waited in a state of fatigue till the sun came out,
“ ere they could have got any dry clothes on their bodies. On
“ the following day, April 13th, eight cases of cholera were sent
“ to hospital.”

The questions still remain to be satisfactorily answered,—Was the cholera generated at Hurdwar? Did it pre-exist on the spot, or was it imported? Against the latter presumption there is the fact that the disease was not prevailing in the surrounding country, and also the length of time which, if imported, elapsed during incubation. That cholera was not generated *de novo* at Hurdwar, is rendered probable by the fact of perfect conservancy and cleanliness having been enforced. But, as Dr. Murray observes, there is no valid reason to question the probability of the seeds of the disease, deposited on some previous occasion, having been brought into action by the rain. The fall of rain on the night of the 11th was evidently the exciting cause, bringing into action the germs of the specific poison of cholera, for the growth of which the dense mass of shivering pilgrims formed a rich soil. How long the poison of cholera may remain dormant has not yet been ascertained, but instances are not wanting in which persons living on ground previously tainted have taken the malady. The disease has even been known to re-appear in buildings occupied the previous year by cholera patients. There are certain soils, which preserve rather than oxidize organic material, and such influence may be exerted on the deposited cholera germ. As instances of cholera apparently hidden in the soil, the following may be quoted :—Some few years ago a party of prisoners were employed making a road in the Guntoor district, and in cutting away the soil, came upon a number of remains of persons who had died of cholera in the famine year of 1838. The disease broke out with great violence among these

workmen.* A number of coolies employed on railway works in the neighbourhood of Salem, in cutting through an old burial ground, came upon a spring of apparently pure water. Many who drank of this water were seized a few hours afterwards with cholera of a very severe type. Such instances of cholera originating after opening up old burial grounds, will recall to mind Dr. Gibb's observation of the occurrence of small-pox at Quebec, immediately following the opening of a small-pox cemetery two hundred years old!

Again it is equally demonstrable that cholera has frequently occurred in India after what may be designated unseasonable showers. In 1865, as mentioned by Dr. Murray, the severe attack of cholera at Mahadeo, in the Panch Murree Hills, originated after rain. In May 1867, the female pupils of the Secundra Orphanage were drenched by a sudden storm of rain, when taking their usual walk. During that night, and the two following days, 31 out of 168 were attacked with cholera, and 15 more during the following six days. On the 19th May there was a heavy storm at Peshawur, and on the morning of the twentieth, cholera broke out with great intensity among the European troops. Dr. Murray adds:—"In the six cholera epidemics which have been under my management at Agra, it appeared about three weeks after the rains set in."

The influence of the sudden change of temperature on the human frame is too well known to require notice here, and nowhere is this influence more marked than in India. It is therefore not irrational to conclude, that the sudden rain at Hurdwar, may have acted in two different manners in exciting the outbreak of cholera; *first*, by predisposing the systems of the people to its influence, by aiding other causes in lowering vitality; *secondly*, by giving activity to dormant germs of cholera poison, lying in, or on, the surface of the ground.

Whatever may be advanced against the assertion that cholera is always communicated by human intercourse, there is no doubt of the fact that it was so disseminated by the pilgrims leaving the Hurdwar festival. For a most elaborate tracing of the routes the dispersing multitudes took, and for the account of cholera as it originated in their track, we are again indebted to the Inspector-General, Dr. Murray. There are 597 reports from districts and towns on the line of returning pilgrims, showing 22,403 deaths from cholera. "There are numerous illustrations

* 2 *Madras Journal of Medical Science*, January 1862.

"in these reports of the manner in which the disease was transmitted to families on the arrival of relatives, to people of villages communicating with the pilgrims, to those who ate the food left by the pilgrims, or travelled in the same carriage with pilgrims and being afterwards affected with the disease. * * The pilgrim stream carried with it cholera, which lined the roads with victims, whose funeral pyres studded the surrounding fields, or whose bodies were thrown into the canal, or collected by the police and buried. The disease was communicated to the neighbouring towns and villages, and the pilgrims carried it with them to their homes, over the whole of Hindustan." At Murree, 500 miles distant from Hurdwar, at Kohat 543 miles away, at Peshawur 561 miles, cholera appeared among the residents, within a short period after the disease had been marked among returning pilgrims.

In October 1867 an order was published, directing that all ground used as cholera camps should be ploughed up after evacuation by the troops. It was also ordered that the ground, especially latrine trenches, within the limits of an encampment, should not be disturbed during occupation, but all refuse, &c., is to be buried at a distance of at least 500 yards. Cholera encampments, after being ploughed up, are not, except when unavoidable, to be re-occupied within twelve months. It was also notified,* on the recommendation of the Sanitary Commissioner for Bengal, that all buildings or articles contaminated by cholera should be fumigated with sulphurous acid in preference to any other disinfecting agent; that floors should be dug up, and fresh earth placed over them; that roofs should be washed with a solution of Mc.Dougall's powder, and the walls freshly leaped. The last-named process, the Sanitary Commissioner believed to be more efficacious and economical than lime-washing. Where the floors are permanent structures, they should be washed in the same manner as the ceiling.

One of the most important papers regarding cholera which has ever appeared, is that "on the removal of troops during attacks of epidemic cholera," by Dr. Murray, dated 18th June 1868. In this document the Principal Inspector-General stamps with the authority of prolonged experience, of a lengthened careful attention to the subject of cholera, and of professional and official position, the doctrine of the communicability of the disease. Having personally superintended preventive measures, during seven different epidemics, Dr. Murray

* P.W.D. Circular, No. 115, dated 17th December 1867.

records his deliberate opinion of the necessity of removal from infected localities—a procedure which not only benefits the affected, but also withdraws a continually increasing source of danger from those who remain behind. With regard to the objection of sickness arising from placing men under canvas at unsuitable periods, it is remarked :—

“When a regiment arrives at the encamping ground before the tents have been prepared in the hot season, or is pitched in low marshy ground in the rains, makes too long marches or commits excess, extraordinary sickness may be expected to ensue. To infer that an increase of sickness was solely owing to the removal, is to ignore these facts, and the after effects of cholera or its treatment, and also the ordinary increase of malarious disease at that season.” Should there be an excess of the average sickness of the station, the increase may fairly be attributed to the movement. On the other hand, if there be a diminution of the ordinary sickness of the station, it may as justly be attributed to the removal.

And with regard to expense, Dr. Murray shows by statistical evidence that the rate of mortality in stations that have been frequently attacked both before and after the systematic use of removal, has *diminished more than one-half*, viz., from 7·09 to 3·23 per cent. Thus the saving of life even in a pecuniary point of view amply compensates for the outlay.

In 1868 was also published a summary of results of personal experience of medical officers as to the best means of treating cholera. The opinions of thirty-five medical officers are here given, one column being devoted to preventive or prophylactic treatment. Attention to the general principles of hygiene, with the use of quinine, are the sanitary preventive measures generally recommended.

In 1868, the voluminous report of the International Sanitary Conference of Constantinople appeared. The principal conclusions arrived at have already been referred to. The Congress stigmatized India, “as the birth-place of cholera, and its permanent home,” * from which it is conveyed chiefly by pilgrims to other countries. They pronounced that cholera is “not a native of Europe and that it has no spontaneous origin there.” And they appear to suppose that the disease was unknown in India previous to the end of the last century. In both their conclusions, however, the Conference seem to us to

* Proceedings of the International Sanitary Conference, p. 478.

be mistaken. D'Orta, a Portuguese physician, published at Goa, in 1563, an account of cholera, and did not even hint that the disease was novel. Mr. Gaskoin has recently translated from the Portuguese a notice of cholera near Calicut in 1503. In 1709 the Jesuit Père Passien, writing from Hooghly, mentions *mordechi* as the disease of that part of India. It is also on record that an epidemic resembling cholera broke out in Aurangzeb's army before Bījapur in 1689, to which Grant Duff says the usual native name for cholera was applied. To the assumption that one part of India, to wit, the delta of the Ganges, is the birth-place of cholera, and its only permanent home, there are many and fatal objections. A disease which has prevailed with equal epidemic intensity, under the most varied conditions of climate, at the level of the sea and in the Himalayan ranges, under the sun of the tropics and among the wastes of Siberia, can scarcely be described as the "native of Lower Bengal." The doctrine of a disease being able to *disseminate* itself in any climate, but to *originate* only in one, cannot be received. The theory is not in accordance with the laws affecting other zymotic maladies. Every one now admits the existence of *typhus* and *typhoid* fevers in India, and their spontaneous origin in this country has never been questioned. As cholera prefers India, however, so they have a preferential site in the colder countries of Europe. Again yellow fever, unlike cholera, will not spread itself out of the tropical zone. A vessel affected with this malady at Havannah or Jamaica, by running north invariably loses the taint in a few days. Yellow fever, indeed, will neither originate, nor disseminate, out of the tropics. Yet cholera, in defiance of general laws, is supposed to do one, but not the other! Were the matter not one of practical importance, it might be left as decided by the Constantinople Conference. But if, on the assertion of the majority of the members of the said body, we admit that Asiatic cholera is "never developed spontaneously, "has never been observed as endemic disease in Europe, but "that it has always entered from without"—if we admit these dogmas as correct, we not only ignore facts connected with the etiology of the affection, but also adopt a very dangerous theory. If the public are brought to believe that cholera is always introduced from without, internal sanitary arrangements will soon be regarded as less necessary. Instead of trusting to home sanitation, an impracticable system of quarantine will be the reed on which public health will lean. The Commission properly

insisted on increased attention to sanitation in India, and especially in Bengal, where they consider cholera may be attacked at the only focus of origin! But for the protection of other countries, they had nothing better to advise, than a large and impossible system of quarantine. Not only did they recommend surveillance over all vessels entering the Red Sea, but should cholera break out at the Hedjaz, they required the temporary stoppage of maritime communication with Egypt and the Mediterranean. And as regards the land, they demanded a line of sanitary posts along the whole Turco-Persian and Russo-Persian frontiers!

In reviewing the general conclusions of the Congress, Major Malleon, then Sanitary Commissioner for Bengal, remarks that it would be out of place to express any opinion of their accuracy, or as to how far they are borne out by experience in India. We have no such feeling of diffidence as that confessed by the military sanitarian mentioned. As regards India being the only birth-place of cholera, and as regards the spread of the disease being prevented by the large quarantine system suggested, we firmly believe that the Constantinople Commission are entirely mistaken. Facts and experience are both against their conclusions.

In a memorandum on the report from the Madras Cholera Committee, the Army Home Sanitary Commission remark, that the Madras Committee open up the whole question of cholera as it occurs in India, in relation to opinions set forth authoritatively by the Constantinople Conference.* The views then enunciated divide themselves into two classes, (1) those more or less hypothetical, (2) those strictly practical. The hypothetical views, on which the Conference proposed to rest one branch of sanitary procedure, have not met with universal acceptance; such, for instance, as the relation which cholera excreta bear to the spread of cholera, and the part which movement of the population plays in spreading the disease. But the practical measures, as cleanliness, fresh air, pure water, wholesome personal hygiene, are shown by experience to be useful.

In the present state of the question, therefore, no greater service could be rendered than carrying out a rigid system of sanitary police in a well known endemic locality, and marking results—the sanitation to include drainage, cleanliness, attention to the state of the adjacent country, and to the habits of the

* Supplement to the *Gazette of India*, May 1869.

natives, as regards food, disposal of excrementitious matter, and the state of the water supply.

The Constantinople Cholera Congress was, however, useful in further authoritatively directing attention to the Indian fairs, religious or otherwise, as the places and times at which cholera originates.* That this fact had already been recognized in this country is however evident from the foregoing, and from other published writings.† But it apparently required the addition of pressure from without, to induce any action on the part of Government, which might be misconstrued as an interference in religious matters. But in 1867 the Secretary to the Home Department, addressing local administrations, remarks: ‡ “Recent experience has made it abundantly manifest that serious epidemic disease is very generally engendered among the large multitudes of people, who periodically assemble at the various centres of pilgrimage in India, and that the pilgrims not only suffer largely, but propagate disease throughout the country on their return journey. Indeed the Medical Conference which assembled last year at Constantinople, believes it to be established, that cholera at least emanates from India only, and the Conference indicates the large periodical assemblages at fairs and pilgrimages as one of the most probable sources of its origin and the most ready means of its propagation.....When, therefore, epidemic disease prevails in any locality in which pilgrims are about to assemble, it is of course the plain duty of the local Government to prevent their collection by every means in its power. But the Governor General in Council believes that more than this can be accomplished, and although nothing is further from his wishes than to interfere in any way with the religious feelings of the people, His Excellency nevertheless thinks that the people of the country generally should be made aware of the serious risks they run, and dissuaded and discouraged, as far as is practicable, from making pilgrimages.....His Excellency also desires that some system may be devised, whereby, at all places of pilgrimage

* Report of the Constantinople Conference, p. 480.

† Vide Dr. Moore's *Health in the Tropics*, p. 185, in which cholera at the fair of Punderpore (Bombay Presidency) in 1860 is described. On that occasion “had bullets been flying about, the results would not have been more fatal.....and to the horrors of the place must be added the horrors propagated from it.”

‡ No. 55-3764, dated 21st August 1867, from the Secretary to the Government of India, Home Department.

"and at all large fairs, sanitary arrangements may be immediately made, and carefully supervised." In a separate communication from the Foreign Department, His Excellency in Council further stated, that he was "satisfied that no measures which the British Government may adopt within the territories under its control, can prove effectual, unless they are supplemented by corresponding arrangements in the neighbouring native states"; and therefore political officers were requested to ascertain what arrangements the several durbars would consent unanimously to adopt.

In response to this latter communication, we have only at hand the reply from the Agent Governor-General for the States of Rajputana, then the late Colonel Eden. This experienced officer was of opinion, that before direct interference could be successful in preventing cholera, it would be necessary to render the chiefs and people acquainted with the most recent and generally received views regarding the malady. Dr. Moore, Rajputana Agency Surgeon and Superintendent of Medical Institutions in the native states, was therefore requested to draw up a short account of the disease, showing its method of dissemination, and mentioning the practical rules tending to check its spread. This was published in pamphlet form in two vernacular languages, and was extensively distributed throughout Rajputana. The preventive measures insisted upon were,—1. Scrupulous cleanliness, especially as regards food and drink. 2. Immediate destruction of all choleraic discharges. 3. Destruction of infected clothing, and fumigation of houses by burning sulphur. 4. Isolation of sick. 5. Necessity of a sufficient diet during long journeys, as pilgrimages. 6. Importance of medical treatment in the early stages. More particularly addressed to the chiefs, were remarks on the necessity of aiding the Supreme Government in carrying out measures for the prevention of the spread of cholera, *first*, by as much as possible discouraging persons, not possessing suitable means, from undertaking pilgrimages; and *secondly*, by guarding their frontiers against either the importation or export of the malady. In conclusion, the opium, pepper and assafoetida pills, as prescribed by Dr. Murray, were recommended as an efficacious medicine, the ingredients of which are obtainable in every village.

In 1869, a cholera hospital was proposed for Calcutta, and the formation of such an institution was sanctioned by Government. Hitherto native cholera patients at Calcutta, taken to the *Medical College Hospital*, have been treated in the same wards

with other sick. Cholera patients in the *European General Hospital*, as in all the other presidency towns, have been treated in separate buildings, or, at least in separate wards. And the result of the two procedures is very remarkable. Since the year 1861 in the Medical College Hospital 66 patients, admitted for other diseases, have been attacked by cholera, of whom 55 died. In the General Hospital, 13 cases only occurred, of whom 3 died. As will be evident from the foregoing observations, for some years past it has been the endeavour, in all mofussil or up-country stations in India, to isolate the cholera-stricken, and it appears strange that in the metropolis of India, ruled by a municipality sufficiently enlightened to maintain a Health Officer, the segregation of cholera patients at the principal hospital should not have been insisted upon. The presidency towns, owing perhaps to the fear of interference with the liberty of the subject, where Europeans, Parsees and educated natives mostly congregate, are indeed in some matters behind the outlying stations. In the latter it was directed in 1869, that whenever cholera appears in an epidemic form among the general population of military stations, tents or temporary sheds or huts are to be placed in the outskirts of cantonments, and a liberal establishment is granted for their maintainance.

In 1869 it was also ordered, that when circumstances permitted, a military cholera camp should be formed 50 miles away by rail from the station attacked. The advisability of this procedure as likely to infect distant localities, may be questioned, but doubtless the order was not authoritatively issued without due deliberation by those competent to offer advice.

A Government resolution of the same period prohibits the conveyance by passenger trains of corpses, when death has been caused by cholera, or other infectious or contagious disorders.

In 1869, local governments and administrations were instructed to institute experiments for testing in some well selected civil stations Dr. Pettenkofer's theory regarding the origin and propagation of cholera. This was in connection with the despatch of Drs. Cunningham and Lewis in the previous year, by the authorities in England, for the purpose of investigating the German Professor's theories in the "home of cholera." The theory referred to may be briefly epitomized as follows:—The germ of cholera is developed into infecting matter in the subsoil; after development the infecting matter ascends, and produces the disease; the infecting matter may enter water and render it poisonous. The conditions of the subsoil rendering it a suitable *nidus*

are, (1) a certain degree of moisture, neither very wet nor dry (2) the presence of organic matter. In any permeable soil it almost necessarily results, that organic impurities are washed down through it, and accumulate in the subsoil water, or in other words over the first impermeable layer. The point therefore to be ascertained is as follows: Is the development and decline of an outbreak coincident with alternations in the amount of subsoil moisture? And to determine this, the level of water in the wells must be daily noted. But those conversant with outbreaks of cholera in India will readily admit, that neither the greatest amount of dryness, nor the most extraordinary saturation of the soil with water, has appeared to influence the malady. It has prevailed with equal intensity in the hot weather when the wells are at the lowest, and in the monsoon when the level of the water was that of the soil. It may therefore be anticipated as probable, that no particular results will follow the investigation into the connection of cholera with the level of subsoil water.

But the most important event as regards the sanitation of cholera during the year 1869 was the publication of Inspector-General Dr. Murray's "Report on Epidemic Cholera." In this, perhaps the most valuable paper on the subject ever passed through the press, are epitomized the opinions of five hundred medical officers serving in India; while the individual views of the author are also expressed with the authority of an experience and a position attained to by few, and with the modesty of a devoted investigator into facts. A belief in the communicability of the disease by human intercourse forms the basis of Dr. Murray's preventive measures. The beneficial effects resulting from the removal of troops during epidemics of cholera are dwelt upon. The formation of a preliminary camp, on the first case occurring, is recommended, and actual removal after the fourth case. With regard to sanitary conditions, Dr. Murray remarks that, however deficient they may be, they cannot induce cholera *per se*; the germs of the disease must be imported into the locality, but, when once so imported, it will spread among the inhabitants in inverse proportion to the purity of the air they breathe, of the water they consume, and the food they eat. It is however difficult to understand why, as cholera has once originated, it should not again originate *de novo* under similar conditions. This must either be allowed, or the belief must be admitted that cholera germs exist everywhere and are liable to be excited into action at any time.

On the publication of Dr. Murray's report the Governor-General in Council caused the thanks of the Government of India to be conveyed to the author in the following terms. "I am to request that you will convey to Dr. Murray the thanks of the Government of India for his able paper, and for the zeal with which he has undertaken the collection and analysis of the opinion of the medical profession in India; and devoted his time, attention, ability, and protracted experience to the laborious consideration of a question of such momentous importance to the well-being of all the inhabitants of India, native as well as British. * * * * The Governor-General in Council does not venture to pronounce on the degree of weight and authority which should be attached to it, but, as a careful analysis by a professional man of Dr. Murray's special experience and long study of the disease, the Governor-General in Council is satisfied that its promulgation cannot fail to stimulate all those whose duties call them to combat cholera to an earnest study of its nature and treatment."

And a leading article in the *Indian Medical Gazette*, dated August 1869, after noticing Dr. Murray's lengthened services as a military medical officer on active service, and as a civil medical officer engaged in sanitary progress and in professional research, thus concludes:—"If ever officer earned a C.B. for service before the enemy, John Murray was the man; but C.B's were not then granted to medical officers. His services then and since would now warrant a higher title, and we still hope that Government will not forget to reward its honest servant and labourer in war and peace, of thirty-six years' standing, by some more honourable and lasting token than mere thanks." And in this opinion there are few who will not acquiesce.

As was mentioned in our observations on Sanitary Commissions, the first real improvement in conservancy—and perhaps indeed it may still prove the *greatest* improvement—was made when Hathaway introduced the dry system into the Panjab jails, just previous to the mutinies. The Panjab method consisted in the absence of all lime from the privies (which, it was found, combined with urinary salts liberating ammoniacal gases) with a flooring of dry earth for a depth of six inches, so that any defilement might be quickly and easily removed. The Prison Committee tried the experiment with success in the Alipore Jail and Calcutta House of Correction, recommending its adoption in barracks, hospitals, and other public institutions, also urging

the abolition of lime, charcoal and ashes. The system was also adopted in the jails of the Bombay Presidency by Dr. Wiehé, who inspected the prisons of the other presidencies during an official tour in 1863-64.

And doubtless this would have been the conservancy system throughout India, had not Moule's dry earth method been proposed immediately afterwards. On this conservancy system so universally adopted throughout British India, we venture to quote from an article published by Dr. Moore in the *Indian Medical Gazette* under date April 1st, 1868. After demonstrating from the works of Budd, Simon and Murchison, that typhoid, pythogenic or enteric fever may be propagated by faecal material, the writings of Threisch, Pettenkofer, Acland, Snow, Carpenter, Allison, Routh, Sutherland, Bidie, Budd, Simon, Gibb and Parkes are referred to, as proving that cholera poison is contained in choleraic discharges. Similarly, the researches of Von Siebold, of Kuchenmeister, of Nelson, of Cobbold, and Humbert are quoted, as demonstrating that certain kinds of *entozoa* flourish in some part of their existence in faecal discharges. "There are then three diseases, *viz.*, typhoid fever, cholera, and worms, known to be disseminated by the medium of faecal material. Hence arises a very grave question, as to the advisability of the much vaunted dry earth system of conservancy.....There is every difference between a mere deodorizer and a disinfectant. There is reason to believe that earth does not act with any great certainty in the latter capacity. It is well known that some soils, such as clay and alluvium, retain organic matter for a lengthened period in an undecomposed form. It is on record, that some years ago a body of prisoners were employed in making a road in the Guntoor district, and that in cutting away the soil they came upon the remains of a number of persons who had died of cholera during 1838, and that cholera immediately broke out among the workmen. Again, a party of coolies, employed on a railway cutting near Salem, opened a spring of very clear water. Those who drank of it, were seized in a few hours with cholera of a very severe type. In this instance the railway cutting passed through an old burial ground. Again, a well known author, Dr. Gibb, informs us, that an epidemic of small-pox at Quebec followed, and by first commencing among the workmen appeared directly attributable to the opening of a small-pox cemetery 214 years old."

That the molecular germs of disease may remain for an unlimited period with vitality unimpaired, cannot be denied. Seeds from Pharaoh's pyramid have germinated. There are forms of vitality capable of existing in boiling water, and we can preserve the poison of small-pox, or *vaccinia*, unimpaired for an indefinite period. And what is true regarding the *materies morbi* of one disease, is equally correct with respect to others. Instead of earth acting as a destructive agent to the germs of cholera, typhoid fever and entozoa, there is every reason to believe that at least some variety of earths will exert a preservative tendency. And if this is the case, the wholesale burial of human ordure, some of which must necessarily be diseased, now going on under Moule's system of conservancy, is, most certainly, simply storing epidemic poisons which will probably be turned up hereafter.

An eminent Indian Officer, Inspector-General Hare, lately provoked a discussion, by reading a paper on the dry earth system of conservancy before the "Metropolitan Association of the Medical Officers of Health."* From the remarks then elicited, it appears that there is a growing feeling that the application of ordure to agricultural purposes is not altogether free from objection. Dr. Thudichum stated:—"It must be taken as certain that fæces are of no value to agriculture whatever, except on a sandy soil." Mr. Girdlestone remarked, that "sewage has not been successful in producing anything but rye grass, which from its nature cannot be made into good hay." Dr. Tripe observed, "that it is questionable if the milk produced from sewage was perfectly wholesome." In India again we find Dr. Mouat stating, with regard to the fever in Bengal jails, that the immediate condition which makes this fever contagious, consists in the noxious exhalations from the large amount of putrifying excreta buried in jail gardens.† And in relation to this part of the subject, it cannot be ignored, that the natives of most parts of India object to the use of human ordure for agricultural purposes. And this antipathy arises from a rooted idea that good grain is not produced of such manure.

A consideration of the sanitary aspects of the subject leads us to doubt if the present extensive application of the dry earth system of conservancy is advisable. Could it be rendered

* *Lancet*, January 4th, 1868.

† *Report on Jails in Bengal for 1866-67.*

quite certain that none but *healthy* fæces would be mixed with dry earth, and either buried or laid on the surface as manure, the procedure would probably be as good as any other method of disposal of the material. But any such assurance is manifestly impossible. Choleraic, typhoid, or dysenteric fæces, or evacuations containing myriads of entozoic ova, must, from time to time, be stored a foot or so below the surface of the earth, or otherwise spread on the surface. In public institutions, during seasons of epidemic disease, fæcal matter will probably be more or less destroyed, or at least disinfected, by such agents as Condry's fluid, or carbolic acid. But these measures cannot always be practically enforced. Some fæcal matter is certain to escape disinfection, while in the case of persons affected with *entozoa*, such precautions would not be employed. Moreover, it has never yet been satisfactorily proved that disinfectants destroy the mortality of the molecular germs of disease. Even admitting this property of disinfecting agents, and also that all diseased excreta could be destroyed in public institutions, it can scarcely be hoped that the general public would resort to disinfection, previous to the use of the dry earth.

Again, the expense of the dry earth system, applied to large numbers, must ever be enormous. As was proved at Wimbledon in 1858,* unless the fæcal material is *smothered* in earth, the latter is not even a deodorizer. Carrying the immense mass of earth and fæces away is costly; places of burial are not always procurable, and in a short time the mass of refuse from a city would surround it with hidden collections of filth. It was such considerations that induced no less an authority than Pettenkofer to declare against the cumbrous dry earth system as applied to multitudes. Similarly, experience has proved the general impracticability of the method as applied to cities in India. Copies of a very important memorandum by the Army Sanitary Commission, on a report and order of the Madras Government, have latterly been forwarded by the Secretary of State to India. The great value of this document lies in its authoritatively showing the shortcomings of the dry earth system of conservancy. It emphatically points to the system as a failure, practically and economically. The dry earth system, it says, "deals only with one part out of one hundred and ninety-one of the total injurious barrack and hospital refuse, while it makes no provision for the removal

* *Lancet*, April 17th, 1869.

"of surface or subsoil matter." In other words, "for every pound of human excreta removed under the dry earth system, there are in every well-regulated establishment about 190 lbs of fluid refuse, which must be otherwise disposed of." And to have two systems of cleansing—a foul water system and a dry earth system—would, the Commission state, simply be paying for two systems when one would answer. If all the excreta, solid or fluid, are to be carted away, this must be done at a cost ten times greater than that which would be necessary, if all the excreta were removed by drains.

But while agreeing that Moule's system is too cumbersome for Indian cities, and also holding that the systematic burial of feces is in many instances simply a storing of disease, we are altogether opposed to any drainage system for India; unless indeed in a locality, as near the sea, where an unlimited amount of water can be procured. Often for nine months, no rain falls in mofussil Indian stations. The use of drains is therefore almost impossible. The system would require excessive expenditure in the storing of water alone. At the same time all closed drains simply become abominations in this country. For our own part we believe that the combustion of all refuse matter and faecal material in furnaces properly placed and tended, would be the most economical and unobjectional method of Indian conservancy.

Before leaving the subject, it may be permissible to remark that the deodorizing powers of earth have long been known, although to Mr. Moule belongs the credit of the presumed beneficial application of the property for the purposes of conservancy, as now so extensively practised. It is a saying, "there is nothing new under the sun." Earth was known and *noticed* as a deodorizer, long before Mr. Moule introduced his patent earth closets. Every cemetery is indeed proof of this quality of earth. Dr. Hathaway's Panjab dry system has already been referred to. The deodorizing powers of earth have been made use of by the Italians for ages. "Whenever in that country night soil is removed, it is customary to mix it with dry earth. A hole is dug in the immediate neighbourhood of the cesspool, and a hole drilled low down into the latter. As the ordure or sock flows, it is mixed with and deodorized by earth, and taken away without unpleasant effluvia."

Matters are now very much changed since the period, some forty years ago, when Dr. James Ranken wrote, "medical police is quite unknown in the Hon'ble Company's Service." The system

of sanitation is now such, that if thoroughly carried out according to existing orders on the subject, everything will be done that is calculated to ensure the health of the inhabitants. That there are numerous Indian stations so badly situated, and with evils of such magnitude inherent in the site or in the relative position of bazars, towns or villages, that no method of sanitation can render them healthy, may be readily admitted. But the rules now in force are studiously devised to secure the desired end, and when disease does occur more severely than ordinary, it not unfrequently happens that some sanitary error of omission is found to exist.

Previous to 1860, sanitary measures had been carried so far as to place the control of sudder bazars under the Cantonment Magistrate, or as formerly designated in the Bombay Presidency "the bazar master," who was also responsible for the cleanliness and sanitary condition of the precincts. Regimental bazars, on the other hand, were under the charge of the Quarter-Master of the corps, who of course was accountable to the commanding officer. Regimental lines and their immediate locality were also under the same authority. Roads, drains and bridges, were under the engineer department, and with regard to the erection of buildings and the appropriation of unoccupied ground, it was laid down that "the health and comfort of the troops are to be held as paramount considerations, to which all others must give way." Previous to 1860, the use of bazar public latrines had also become general, and a great step in advance was made, when at Agra cultivators were induced to utilise the manure. The position of slaughter-houses, stables, the size of officers' compounds, the height of fences, the prohibition of holes in which refuse or stagnant water might collect, were also the subject of regulation. In Bengal, committees were assembled quarterly, for the purpose of reporting on roads, drains, and sanitation generally, the reports being forwarded to the Quarter-Master General of the army. In addition, medical officers were required to furnish periodical topographical reports, specifying the existence of any cause of disease, and the Superintending Surgeon on his visits was called upon to do likewise. It was also permissible for, or rather imperative on, any medical officer to report the existence of sanitary defects.

Since 1860, the following are the principal additions which have been made to the system of cantonment sanitation. In 1861 it was directed that medical officers, making reports on matters affecting the health of the troops, should furnish a duplicate to

their commanding officers. In the same year, medical officers were reminded of the duty of vaccination in regimental lines, and new regulations on this subject were published in the Bombay Presidency. Unfortunately, however, the prophylaxis was not made compulsory on the women and children of the sepoys. By G. G. O. 1494 of 1861, the senior medical officer in each station was required to prepare a summary of the returns, with notes on the prevalent diseases, with a view to prevention, for the information of the commanding officer. Revised instructions were also issued to medical officers as regards framing annual reports, and the duties of Deputy Inspectors-General were more distinctly defined. A monthly sanitary report in the War Office form, being answers to printed questions, was also required. In 1862, the Commander-in-Chief of the Bombay Army, calling attention to the regulations making commanding and medical officers jointly responsible, remarked that by attention to the regulations, reference to superior authority would frequently be avoided. In 1863, the Blue Book containing the report of the Royal Sanitary Commissioners appointed to enquire into the sanitary condition of the Indian Army was published, the 32nd recommendation of the Commission being "that the sanitary duties of regimental, garrison, and inspecting medical officers, prescribed in the new Medical Regulations of October 7th, 1859, be applied, or adapted, to all stations in India; and that properly trained army medical officers of health be appointed to this service at the larger stations."

In the same year, orders were issued for the formation of Cantonment boards of health, to whom, according to the Public Works code, the barrack department entrusted with the executive duties of conservancy is responsible. Regimental conservancy, however, remains under regimental authorities. On the final separation of the Indian and British medical services, it was decided that the senior local medical officer of both services should act as sanitary advisers to the officer commanding, on all matters relating to the two departments.

The position of burial grounds in new military stations is now fixed by regulation. In many of the old stations and in most native villages, both native and European grave-yards are very badly situated with reference to sanitary principles. During the investigation, in 1863, into the causes of the epidemic fever devastating the Hooghly districts, the condition of burial grounds and places of incremation was especially condemned,

And until recently, the want of attention to European station grave-yards has frequently attracted attention. In 1863, a Commission of European and native gentlemen was appointed in Bombay for the purpose of ascertaining the practice relative to burials among the various communities in Bombay, and of inquiring whether any detriment to health arose from such practices, and of devising by what means the evil might be diminished. At that period, indeed, the condition of burial grounds in Bombay was disgraceful. The Muhammadan burial ground at Sonapur had been encroached upon by the sea, "leaving a surface from above downwards of some ten or twelve feet in extent, through which bones of all descriptions protrude, demonstrating how, year after year, body has been laid upon body, to form the now existing mass of human putridity."* The Christian burial ground, and the Portuguese grave-yard, in the immediate neighbourhood, although not thus disturbed, were in bad sites; while the Parsee "Towers of Silence" then, as now, occupied one of the best positions in the island. Here, in modern times, the vulture preys upon the dead body, as in heathen mythology the bird is reported to have feasted on the living. "The Towers of Silence are immense structures of variable diameter, raised twenty, thirty or more feet from the ground, in the centre of which is a well, covered by an iron net-work frame or grating. On the latter are placed the corpses of the Parsee population, and before the mourning relatives have left the ground, hundreds of carrion birds, of voracious vultures and hungry crows, are quarrelling, fighting, clawing, like so many ornithological devils, at the specimen of humanity exposed to their ravages. The delicate Parsee female, the portly merchant, the withered sexagenarian, are all thus disposed of, and we are credibly informed that two hours after the deposition of a body in the 'Towers of Silence' bones alone are to be found, which are eventually thrown down into the well enclosed in the tower. At the same time, the loathsome carrion birds, with their bald heads and hideous claws, arrange themselves in rows on the summit of the towers, bloated and surfeited from their ghoul-like feast; secure in the knowledge that by waiting where they are, a repetition of the festival will take place to-morrow."† And of the truth of the above description we can vouch from personal knowledge. But the practice of thus

* *Bombay Saturday Review*, 1862.

† *Bombay Saturday Review*, December 1862.

disposing of the dead, revolting as it may appear to us, is certainly not more dangerous to the health of the living, than that method of burial, which permits the bodies to be uncovered either by the washing of the sea, or by any other cause.

As one result of the Bombay Committee, a patent *Incinerator* was proposed for the purpose of effecting thorough combustion of Hindu bodies. But this community persists in the ancient plan of the funeral pyre, although it frequently happens that lack of wood, or rather of the means to purchase wood, results in incomplete cremation.

In 1864, rules regarding burial grounds in the diocese of Calcutta were published by the Public Works Department, the chaplain and commanding officer being made responsible for the condition of these localities.

In 1867, a remarkable article written in Hindi appeared in the *Dacca Prokash*, condemnatory of the barbarous practice of taking sick people to die on the banks of the Ganges. It was observed that, in addition to the chance of recovery being lessened by exposure, the cruelty of the custom was not exaggerated from the fact that those who did not die were ever after looked upon as outcastes. It was also implied, that this religious rite was not unfrequently made the means of removing infirm, and troublesome, or obnoxious relatives. Opinions regarding the legality, cruelty, or necessity of the procedure according to Hindu religion having been obtained from various authorities, both European and native, the Secretary of State recorded his conclusion, agreeing with that of the Government of India, that it would be well if the practice were to be discontinued, but that "it is not desirable to have recourse to special legislation for its suppression."

We occasionally hear much of the disgraceful condition of grave-yards in India, and sensational articles have, from time to time, appeared in the Indian journals on this subject. But it is rarely that Christian graves are desecrated. The surface may be untidy, and the grass may be encouraged to grow for the chaplain's horse. But our system of deep burial and substantial coffins effectually protects the corpse. It is, however, far otherwise in Muhammadan or other native grave-yards. There the jackal, or pariah, finds little difficulty in disinterring the slightly covered dead. Hence sights revolting to the senses and injurious to human health, are common in such localities. Individually, we hold that the more cleanly and salutary method of disposal of the dead is by burning, provided the combustion be complete, and such a

result is simply a matter of a plentiful supply of fuel. During the cremation of a corpse no unpleasant effluvia is perceptible, and all that remains is a small heap of whitened ashes. We are, however, aware of Christian prejudices against the procedure, not less bigoted than those held by Hindus against burial. While therefore the State still permits each sect to dispose of its dead in any manner most in accordance with its ideas and customs, the desirability of such disposal being complete is unquestionable. And in this matter sanitation has scarcely commenced.

Among the numerous means which are required to be adopted to preserve the health of Europeans in India, there are none of such vast importance as the establishment of hill stations, or sanatoria. As the Psalmist prized his mountains at a high value—"he brought them within the borders of his sanctuary, even to his mountains which he purchased with his own right hand,"—so should we regard the hill ranges of India. Medical men, indeed, from the time of Lind, have not hesitated to recommend for the habitation of Europeans in tropical climates such elevated localities "where the heat of the day seldom exceeds 80°, and the cold of the night is about 54°."

The establishment of the first sanitary station in India appears to have been due to the recommendation of Dr. Gibb of the Bengal Army, who as early as 1820 was exerting himself in this direction. This officer was ably seconded by Julius Jeffreys, who in 1824 wrote his essay "On the Climate of the Hill Provinces of the Himalayas." In consequence of this essay, the attention of Government was more immediately directed to the subject, and the stations of Simla, Mussourie, and Landour were shortly afterwards selected. Since that period up to the commencement of the decade, the number of hill stations, civil or military, in Hindustan had increased to nearly 30.

But much disappointment was experienced with regard to the climate of elevated regions. Too much was expected from them. There was a tendency to overrate their influence on disease, and it is only recently that the true value of Indian hill climates is becoming fully understood. They should be regarded as the means of *maintaining* the health of soldiers, not as curative agencies. The true value of the climate of the Indian hill ranges and elevated regions is *preventive*, not *curative*. There are numerous maladies either not benefited or actually

increased by the hill climates. The same, indeed, may be said of the rapid change from the tropics to England. Hill stations hitherto have been principally made use of as places to which sick Europeans might be sent. This is altogether a mistake. It is by the location of healthy men on the hills that the benefits of their climate will be obtained. And this is a very different matter to the simple use of the site as a sanitarium or summer residence. We fully believe that a regiment, fresh from England, placed on the hills, would enjoy the ratio of health appertaining to similar classes in most European temperate climates. The system of the men would not only be exempt from the debilitating effects of heat, dry or moist, during the hot or monsoon seasons, but would also experience the bracing effects of the cold weather—an advantage hitherto too much ignored, when forming estimates of the value of hill climates. But to ensure success, it is a *sine quâ non* that healthy men are so located. Thus to situate regiments debilitated by a prior exposure to the heat of the plains, and with many of their members, as must be the case, more or less diseased or prepared for disease, is equivalent to increasing sickness and mortality. The influences of rapid changes of temperature, especially from heat to cold, are physiological facts which cannot be ignored either in the consideration of the advisability of permanent hill stations, or when sending invalids to such localities. The hill stations should rather be made the intermediate step between service in a temperate climate and on the burning plains of Hindustan. This is the proper use to which hill climates should be put.

The objections which have been raised by certain authors, that troops located on hill ranges, if called upon suddenly for service in the plains, would suffer greatly from disease, we consider to be altogether untenable. It can scarcely be denied that troops fresh from the hills would enter on a campaign with a greater amount of physical force and vital energy than others already debilitated by the heat, malaria and discomforts of life in the plains. It would, indeed, take a considerable time to induce that condition of debility and proneness to disease among the former, in which the latter would commence operations. It is true that instances occurred during the mutinies, of regiments descending from the hills and suffering a great mortality on the plains. But these corps had been previously weakened and predisposed to disease by a residence in the plains, a condition which their removal to the hills only tended to confirm. Again, the

regiments in question, *viz.*, the 1st Fusiliers, the 2nd Fusiliers, and the 75th Foot, were hurried to the lowlands, without time for ordinary marching arrangements, at the very worst season of the year. They had to make forced marches to Delhi, they left their water-carriers behind, and they entered a country afflicted with epidemic cholera. No wonder sickness occurred in these corps! Here we had soldiers, some of whom had been only one month at the hills (75th Regiment), and who must necessarily have been cachectic from former residence on the plains, suddenly called upon to make the most excessive exertions in the worst season of the year, and under the most disadvantageous circumstances. As an almost inevitable consequence, they suffered from disease, and, under similar conditions, similar maladies might be expected. But even should great mortality occur on the sudden removal of regiments for service on the plains, we maintain that the death-ratio, for any lengthened period, would be infinitely less than the ordinary rate obtaining on the plains. But it does not follow that regiments suddenly moved from the highlands *must* suffer from extraordinary sickness. The probability is that such would not be the case. They would take the field fresh in health and spirits, and not, as their comrades from the low lands, deteriorated and exhausted by the heat and malaria of the plains. "The majority would require months 'to bring them to that state of *cachexia* which they would 'have acquired on the plains before the order for active service 'arrived.'" As a rule, the European enjoys the best health during the first year of residence in the tropics. Degeneration, the result of heat and malaria, is a more or less rapid process, commencing from the time the white man first lands in India. We believe that if it were possible to transport a European regiment from England to this country in a day, use it in a campaign, and then send it back, the mortality in that regiment would be less than in one of the so-called acclimatized corps—equal care and sanitary arrangements being of course applied to both bodies of men.

We are thus urgent and decided in the expression of our opinion, because we believe the hill ranges of India have not hitherto been made that use of, which the welfare of the soldier, or indeed the economical holding of the country, demands. As Sir Ranald Martin long since remarked, "the hill ranges have excellencies peculiar to themselves," but regiments still remain on the burning plains, even within sight of the hilly tracts. And not only so, but there is every probability that the position will

be indefinitely protracted. At some fifty places in the plains, palatial double-storied barracks are rising, upon which some five millions have already been spent, and on which it is intended to expend eleven millions. This work is, in our opinion, a huge mistake. The erroneous idea has prevailed that the health of soldiers is to be secured by lodging them in massive structures. But we are altogether opposed to this theory. We hold that, compatible with protection from weather, sun and rain, the less massive a soldiers' barrack may be, the more likely it is to prove a healthy residence. Indeed, we go further and submit that a change from one locality to another would be advisable, and even if this entailed the desertion periodically of temporary barracks, and the erection of new ones of the same class, the expenditure would not amount to the millions required for the upper-storied palaces now in course of erection. Ere long, it will be found that no immunity from disease is afforded by these magnificent barracks, and when too late, the error now being committed will be confessed. It is lamentable that some of this money, now being devoted to barracks on the plains, has not been expended in rendering hill stations habitable. The money would be much better invested in the latter requirement. It is equally lamentable that the mistaken notions expressed by various authors, as that the troops would suffer if brought down to the plains, have resulted in the determination to keep so many troops on the plains. For even admitting such suffering, the sickness or mortality would be extraordinary and exceptional—not ordinary as now.

Of course political necessities must ever forbid the evacuation of certain stations by European troops. There are strategical points which must be so garrisoned at whatever cost of money or life. But on the other hand, there are many places where the presence of Europeans, formerly necessary, is not now required. And the number of such stations will increase as a net-work of railways is spread over the land. There can be no doubt that at least half the European army might be located on the hills, without danger to the stability of the empire.

Early in the period under review (1861), a volume was published under the authority of Government, entitled "A Report on the extent and nature of the Sanitary Establishments for European Troops in India," but which is in reality only an account of such stations in the Bengal Presidency. In this volume also numerous localities are indicated as fitted for the residence of Europeans, among the more important of which may be mentioned Cheerat for Peshawur troops, the Cherra

Poonjee Hills, Gurhwal in the Himalayan range, the Khasia Hills, Puchmurree, Parisnath, &c. Little, however, appears to have been effected during the decade towards the occupation of any of these or other ranges as preventive sanitary stations—that is, as localities to be occupied by healthy men, not sick or convalescents. Subathoo, Dugshai, Kussowlie, and one or two others, now remain the only hill stations of the Bengal Presidency (including of course the North-West and the Panjab in the term) at which a regiment of Europeans can be located. Similarly, Madras only possesses Ootacamund, and Bombay no station of the kind. Small sanitary stations as Bulsar on the Guzerat Coast, Ghizree near Kurrachee, Taraghur near Nusseerabad, and Mount Aboo, are certainly to be found in the latter Presidency, but the two first are not hill stations, and the latter only would afford space for a regiment. A proposal, however, to place a full regiment on Mount Aboo, using the hill as the preparation for the plains, was latterly negatived by Government on its presumed unhealthiness based on a mistaken appreciation of statistics and sanitation.

It would appear that sanitation in hill stations has always been more backward even than on the plains. It seems to have been presumed that hygienic precautions were less necessary at a few thousand feet greater elevation. Confidence was placed in a naturally good climate, and the assistance of sanitation ignored. It was forgotten that, in the elevated regions of India, while the cold is not sufficiently intense to check putrefaction, the heat is not great enough to act as a preservative agent, as it frequently does on the plains, where bodies of animals and other materials dry up like mummies, no decomposition taking place. Similarly, the urgent necessity of draining a hill station was not unfrequently derided. Those thus acting forgot that mountain ranges are composed of rocks, in the hollows and valleys of which disintegration and decay of vegetable products have caused deposits of rich soil of a very porous description; and that water percolating through this sponge-like mass, lodges in the cavities of the rocks, from which there is no escape except by evaporation. Lastly, some hill stations being under civil, not military, control, and only resorted to during the hot season, is another reason why sanitation has been delayed in such localities. Persons arriving from the plains into a temperature 12 or 15 degrees lower, finding themselves free from the plagues of heat, flies, and mosquitoes, able to obtain refreshing sleep at night and to take exercise by day, imagine the change

delightful, and the climate not to be improved by sanitary measures.

In 1861, writing of the condition of Ootacamund, Dr. Mackay reported :—" Every convenient bush is made use of to deposit filth under. Should the preparation for its reception continue in the way of a disregard of all sanitary arrangements, there is every reason to fear that cholera will some day exhibit its virulence on the Neilgherries, as it has in other temperate climes.....The station is divided by a deep valley, a large portion of which is filled with water forming a lake. At the upper extremity of this, the large station bazar is situated: the houses there are crowded together; those in the lower street are built close to the water, many of them on a foundation formed by the rubbish thrown out from the houses above and the filth washed down by the rains from the upper street. With every natural facility for doing it effectually, drainage has been totally neglected, not only in the bazar but throughout the whole station.....In short, the whole station is a strange mixture of neglected compounds, bogs, and neat flower gardens. The sweepings and refuse of each dwelling are thrown where they can be conveniently disposed of. It is argued that the station has been healthy: that such things are better left as they are: that no injurious consequences can result in this region!"

According to Mr. Grant, writing in 1852, nothing could be worse than the state of the conservancy at Simla. The smells along the by-paths were described as most disgusting from the accumulation of human ordure, offal and dead animals. Ten years later, 1862, Dr. Clarke wrote :—" There is no conservancy here, and neither the local nor municipal authorities appear to have instituted any measures for providing for a complete system of drainage. If, in years past, the welfare of the community had been duly considered, some authority or other might have prevented the growth of the bazar to such an enormous and unnecessary extent. It is now a great central evil, militating against the sanitation of the station, and instead of being, as it should be, a clean, regularly-built native city, it is an unsightly collection of houses.....and radiating from it in all directions are drains and cesspools offensive and filthy to a degree."

Of Nynsee Tal it was stated in 1861 :—" If any one doubts how unhealthy Nynsee Tal is becoming, let him go into the grave-

“yard, and count the number of new graves, and then let him go into the soldiers’ hospital, and see the pale, yellow faces of men in whom hope has died away Another great nuisance of Nynsee Tal I have alluded to—I mean, the rank state of the lake and the jungle round the lake. To walk round the lake on the lower mall is quite enough to give a weak man dangerous fever—so great is the malaria.” And in another place it is said that “the conservancy arrangements of Nynsee Tal have hitherto been extremely bad.”

Of Mount Aboo it was reported in 1862:—“Thus, therefore, it may with truth be stated, Mount Aboo presents most of the essentials for a sanitary station. I regret, however, being obliged to repeat the statement made in my last annual report, that the labour of man has not developed and increased the advantages and capabilities of the locality, and that sanitary science and medical hygiene are not yet made available to the extent which, I again respectfully submit, ought to have been the case. If matters are allowed to continue as they are, future medical officers will have to report, not a mild, but severe type of malarious fever; not isolated cases of typhoid, but epidemics of that disease; not immunity from cholera, but its ravages on the excreta-loaded ground.”

Now, all the foregoing refers to the state of the localities mentioned eight or nine years back. But that no very great improvement has yet taken place, is evident from the following. As regards Ootacamund, a memorandum by the Army Sanitary Commission at home on a report on the sanitary condition of Ootacamund, dated 22nd April 1869, shows how much more difficult it is to remedy sanitary evils than to prevent them. “Ootacamund occupies a healthy locality, especially selected on this account as a sanitarium, at an elevation of 6,000 feet above the sea level. It has nevertheless become so far *used up*, that fatal typhoid fever has appeared among the residents as an endemic disease. Medical officers assert that the conditions have progressed from bad to worse, culminating in a state of matters which threatens not only to rob the station of the character it has enjoyed as the leading sanitarium of India, but to make it dangerous for invalids to resort to it at all.”

As regards Simla, in 1867, we find Dr. Ross, then Surgeon to the Commander-in-Chief, writing that the existing sanitary defects had been often brought to notice, but that it may still be said of Simla, as of Rome in the present day, she will

"deny the existence of disease until it has gained the "upperhand and there is nothing to be done but succumb "to it, and then on the first symptoms of relief go back "to her old ways, equally incapable of learning from the "past or providing for the future." In 1868, Dr. De Renzy made startling revelations with reference to the impurity of the water supply. In 1869, Dr. May stated the water of Simla is naturally the most pure, while the most impure is consumed. In 1861, Dr. Murray pointed out the cause of the diarrhoea so prevalent at Simla to be *local*, arising from the water drunk, which is chiefly surface water drained through dense vegetation with imperfect conservancy. In 1869, the water derived from the same source is still consumed, the reservoir containing "fæcal matter, bones, old shoes, sardine "boxes, and preserved-soup tins."

And the prophecy regarding Mount Aboo has also been literally fulfilled. Since the remarks relating to this hill station were written in 1861, malarious fevers have continued, typhoid types have not been unknown; while during the year 1869, epidemic cholera visited the locality which was formerly totally free from this scourge.

In 1869, the attention of the Panjab Government was drawn to the defective sanitary conditions of Murree. The Panjab Sanitary Commissioner pointed out the want of suitable latrines, the overcrowding of the bazar, the absence of a properly regulated slaughter-house, the want of arrangements for filtering the water of public reservoirs, as the most pressing sanitary requirements. The Lieutenant-Governor urged that these matters should receive the most earnest attention of the Municipal Commission, and requested a report on the action taken. And, with a view of raising funds for the purposes indicated, any reasonable increase of taxation would, it was intimated, be sanctioned.

And so on might be quoted *ad nauseam*, regarding most hill stations in the country. Government, it must be confessed, are anxious and willing to improve their sanitary conditions, and do so effectually in the military stations. In other localities the desire is thwarted by the action of self-interested municipalities, or by the obstinacy and ignorance of local officials.

After the transfer of India from the Company to the Crown, the subject of colonization was again revived, and afforded an opportunity for the expression of very contradictory opinions

on the subject. Those having a practical acquaintance with the country and climate, held that colonization of the Indian plains by Europeans was impossible. Others, having merely a book-knowledge of the country, or impressions derived from a cold-weather trip, expressed opposite views, declared that the dangers of the climate had been exaggerated, and called loudly for an unlimited number of "Edens" on the waste lands of India, "which only required labour to convert them into smiling gardens." But it appears to be now generally admitted that the plains of Hindustan can never be tilled by European labour. Even those, who, ignoring statistical and authentic data, based their opinion of the practicability of colonization on the reputed healthy appearance of indigo planters, now recollect that indigo planting is not *colonization*; that living in a good house, and superintending a large number of Indian coolies, is not the hewing of wood and the drawing of water of the colonizer's life. Both statistics and independent observers agree in the conclusion, that the mortality of Europeans in India increases in direct proportion to age, length of residence, and nature of occupation. If we refer to tables 4 and 7 of the report of the Royal Commissioners appointed to enquire into the sanitary state of the army in India, we find the death-rate, after the first year, gradually increasing with length of residence; but in a ratio much greater than in other countries. The statistics also of Ewart, Waring and others, point to a similar result. In his evidence before the Select Committee on Indian colonization in 1859, Sir Ranald Martin adds the weight of his opinion against the possibility of Europeans living as colonists on the plains. Dr. Moorhead insists on the degeneration, the result of heat and malaria, which commences in the system of the European from the day he first enters the tropics. Dr. Chevers is decided against the colonization of the plains. Dr. Moore writes:—"Acclimatization, as regards an Indian sun, is simply impossible. Exposure, instead of hardening the system, has a contrary effect, and the longer Europeans remain in the country, the more they feel the effects of the tropical sun. Men, with a larger amount of strength and vital energy than others, can bear exposure and effects of heat longer than those not so gifted; but the deteriorating process, though slow, is nevertheless certain, and if acute dysentery, epidemic cholera, ardent fever, or sunstroke, do not some day suddenly destroy, insidious malarious disease, *cachexia loci* or *splenic leucocythemia* sooner or later results." And not

only do these climatic conditions affect *all* Europeans, but their *progeny* is also subjected to similar influences, which act even more powerfully on the young. Not a single reliable fact has yet been adduced, evidencing that the European race can be continued on the plains of India even for a few generations, without admixture of Asiatic blood. All authorities, indeed, agree that not one pure descendant of the Portuguese, once so numerous and powerful in India, can now be found. It would, indeed, appear to be a universal law of nature, that the inhabitants of one zone shall not flourish in another. Captain Hall, the Arctic traveller, tells us that Esquimaux, brought to a temperate climate, invariably sicken, and often die from consumption, if not returned in time to their ice-bound homes. Similarly, the mortality of negroes in New York has latterly been double that which affected the class, before freedom caused them to move from the sunny, swampy south. Climate affects even the lower animals. It was remarked as far back as Henry Marshall's time, that domestic animals of colder climates, dogs, cows, sheep, horses, all sicken and die, if exposed to the climate of a tropical zone. If not exposed to vicissitudes of weather, deterioration with ultimately similar results takes place, instead of rapid mortality.

But it has been argued that, as both the Anglo-Saxon race and the Aryan Hindus are descended from one common stock, so both classes should be equally able to inhabit a tropical climate. Setting aside the fact that they are not so able, the extreme weakness of the above argument may be easily exposed. The Aryan Hindus were not brought to India by overland steamers, nor even by sailing vessels round the Cape. They descended through centuries of time over the slopes of the Hindu Kush, and, gradually mixing with the aborigines of the land, doubtless became altogether changed in habits, ideas, manners, customs, mental and physical constitution, by the influences of change of food and change of climate. Buckle has well shown how such conditions act on a people submitted to their operation. In a country blessed with more rain than now falls on Hindustan, with a tropical sun over-head, a virgin soil, and abundance of forest-trees destroying malaria, the Aryan Hindus had little else to do but scatter their new found food—the rice—on the bosom of the earth, and enjoy the *dolce far niente*, until the ripening ear aroused them to the necessity of collecting their crops. In so mild a climate, the slightest structures sufficed for houses, and the smallest amount of covering for raiment. And were Anglo-

Saxons subjected through an indefinite period to such influences, the probability is that they would gradually be acclimatized, but would become altogether changed in the process. They would in fact become Hindus, and lose the characteristics of Europeans.

As no action has of late been taken in the matter of the colonization of the Indian plains, it may be considered that in the foregoing remarks we have been combating a shadow. This is not, however, altogether the case. An agitation regarding the colonization of Indian waste lands occurs periodically, and erroneous impressions of the practicability of the step are abroad. Anything, therefore, tending to set the matter at rest, cannot but be worth the trouble of saying.

The question of Europeans living and flourishing as colonists in the more temperate climates of the hill ranges is altogether a different matter. The proposition of free grants of land has again and again been made in favour of men who have done effective service, and who desire to turn Indian colonists. The scheme, as recently set forth by an anonymous author in Madras, is indeed a repetition of the suggestions for "military colonization" so often before mooted. It has been the opinion of some of the ablest writers on Indian subjects, including the late Sir Henry Lawrence, that it would be both politic and practicable to establish colonies on the slopes of the Himalayas, where soldiers, on retiring, might be induced to settle down in peaceful pursuits. The policy of the arrangement, the advantage to Government which would accrue from the presence on the hill slopes of a number of military colonists available for active service on any emergency, is sufficiently evident. And the visionary spectacle of smiling Anglo-Indian villages, with the accessories of a green, a church tower and a school, are sufficiently alluring. But the practicability of the scheme, or even its possibility, is by no means so assured. Granting the climate to be suitable, the great majority of European soldiers, who have served their time, are not fitted for the duties of colonists. Neither their habits nor physical condition would at all qualify them for the new life. As a recent writer observes:—"A British soldier, who has been accustomed to be looked after all his life, is a helpless being when he has to look after himself"; and if, as would probably be the case as the result of previous service, he had become degenerated or actually diseased from the effects of heat and malaria, the probabilities of success would be reduced to a minimum. Military colonization cannot, indeed, be regarded as offering a fair chance of success.

There remains, then, colonization by arrivals fresh from Europe. It was mentioned above, that the soldier would probably fail, even granting the hill climates to be suitable to his temperament and constitution. But it cannot be asserted *ex cathedra* that even the hill climates would admit of the perpetuation of a healthy and vigorous European stock. The question has not yet been decided by experience. And the opinions of those best qualified to judge are, on the whole, unfavourable. Sir Ranald Martin, in his answers before the Select Committee of Colonization, stated that Europeans might flourish in the hills "to a certain extent not yet determined". Battie, before the same Board, "had no doubt a race "of persons well off in life would be continued in the hills"; but whether they would deteriorate under the most favourable circumstances was a question "he was not prepared to answer. "Nothing but time can solve that question." Dr. Chevers, than whom no authority is entitled to greater respect, is very decided on the subject. "To become enterprising colonists on the "slopes of the Ghats and Himalayas, they must be a robust, "vigorous, intelligent race, capable of maintaining our wealth "and our empire equally by commercial industry and by force "of arms. It is more than doubtful if the race could be perpetuated at all; but if it could, would not their children and "their descendants, reared as exotics on the summits of isolated "mountains, apart from the whole bustle, traffic, trial, struggle, "society, and novelty of the great world, in which, from the "cradle to the grave, the minds of the rest of mankind are "daily educated, become a puny, spiritless race, scarcely capable of self-support, and therefore miserable in themselves "and burdensome to the State?" Dr. Moore also observes:—"Whether European progeny would retain their characteristics, if obliged to undergo the exposure and labour consequent "on tilling the ground of even hill ranges, can only be determined by time and experiment. With constant infusion of "new blood and due attention to sanitary principles, such "might be the result."

To the uncertainty regarding the action of climate, must be added the doubt whether colonists in the hills would be pecuniarily successful. There would be no extensive grain cultivation. The nature of the ground would forbid this source of profit. It is questionable, indeed, if colonists could grow grain sufficient for their own consumption. As the climate permitted, such branches of industry as the cultivation of

tea, cinchona, coffee, vines, oranges, and olives, would be available; but even in the pursuit of these occupations, the men must descend into lower ground than they would fix their habitations upon, and they must often visit malarious valleys, from which it is undoubted their health would suffer.

During the last three seasons, European soldiers have been employed with great benefit to their health on road making in various parts of the Himalayas. And this has been brought forward as an argument that colonists would be equally fortunate. But it must be recollected that soldiers sent upon such duty have everything provided for them; the means of sustenance not only brought to their doors, but placed on the table before them. These road-makers were not called upon to descend into malarious valleys; their time of labour was regulated with due reference to a hot sun; they were not under the necessity of facing the monsoon rains, nor the severe cold of winter; they were under effective sanitary control, and in charge of their own medical officers. The comparison of men in such favourable circumstances with colonists and their women and children is absurd.

It has also been the fashion to bring forward the healthy condition of the children in the three Lawrence Asylums in the hills. It is asserted that boys and girls in these schools enjoy an amount of health and vigour equal to that of persons brought up in temperate zones. "The robust appearance of the inmates of the Lawrence Asylums, the muscular development they undergo in the cool climate of the hills, all tend to show that the mountain ranges of India are suitable to the rearing of European children, and that all necessary conditions for the maintenance of physical vigour in the race exist in these localities." But here again, the circumstances of these children are entirely different to the conditions of a colonist's life. "Boarded floors, warm covering for the feet, seclusion of the children in inclement weather, attention to ventilation and diet, improvement of intellectual status, and prompt medical care," are not always available for the children of colonists; whereas in the Lawrence Asylums such advantages are but a portion of those enjoyed. Neither have we any trustworthy statistics regarding the future of those children who have left these schools to enter upon life. Lost in the "wide, wide world," their career is generally unknown. Even the reports of the *Sunawar* establishment—the oldest of all—do not

afford any information regarding the after-life, and physical and mental energies, of its former pupils.

An attentive consideration of the question of colonization of the Indian hill ranges induces the conviction that attempts of the kind would terminate in failure. It is, indeed, quite possible that, with constant infusion of new blood and with unremitting fostering care from the State, the race might be *maintained*. But the experiment would not be either a sanitary or a pecuniary success. And such collections of Europeans, supported by the State, are not colonization, in the sense in which North America, Canada, and Australia have been colonized. Yet anything short of colonization, in the full sense of the term, would scarcely meet our requirements in India. It may, therefore, be admitted that the Indian Government has exercised a sound discretion in not obeying the periodical agitation for an expensive, and, to be feared, fruitless experiment.

Similarly, the attempt to form colonies of East-Indians as proposed by some authors, is not advisable. Although amongst this class there are many meritorious, and not a few possessing more than common intellectual and physical energy and strength, yet the reverse too often obtains to permit the expectation that the race, as a class, would prove successful colonists. The worst points of both the European and native character are not unfrequently combined in the hybrid—a condition, not only prevailing in this section of society in India, but also noted in other parts of the world; as in North America, for instance, where Europeans have sexually mingled with the coloured races. Before leaving the subject, however, we may record our belief that colonization of the Indian plains by Africans would prove a decided success. And apparently, as many may be obtained as would be required for the purpose. It was only lately that advertisements appeared in the Bombay papers, stating that Africans, captured in Arab slave dhows, were to be had for the asking, provided any gentleman became responsible for them, and would entertain them as free domestic servants. During the mutinies, the proposal to enlist African regiments was much debated. And African colonization is worth attention now.

In the foregoing pages we have indicated the progress which sanitary reform has made in India, mainly in connection with the European and native army. What has already been said is probably sufficient to demonstrate the active interest which the Government has lately taken in the important question of

sanitation ; but there still remain many topics, more particularly affecting the civil population, in regard to which the action of Government is worthy of note. These topics we hope to be able to discuss in the next number of this *Review*.

ART. VI.—MISSIONARY LABOUR IN THE EAST.

THERE are few great questions to which the old fable of the knights and the shield will not apply, but none to which it is more apt than the noble work which engages all classes and denominations of Christians—the evangelization of our Indian empire. Is it to be wondered that, where races and temperaments, beliefs and degrees of intelligence, are so various, the modes of proceeding favoured by missionaries, coming in contact with theatres of operation essentially diverse and experiences in many respects conflicting, should differ as materially as the phases of their subject? It would be surprising were it otherwise. All that can be expected is that, refraining from prejudiced adherence to any one system, a broad view of the subject should be adopted; and, the object of all being the same, the attention of all should be given to ascertaining the means whereby, under different sets of circumstances, that object may be best attained.

One of the most mischievous powers acquired by the fairly-educated mind is the facility of specious deduction, unguarded by that aptitude for careful testing of every link of the chain which marks the truly powerful reasoner. Charmed with this new-born faculty, and the symmetry of the edifice thus raised at will on the slenderest substructure, the European of fair education and parts courts opportunities of display, and proceeds to generalize on every subject coming under his observation, deducing from limited experience results, the wideness of whose application should in itself render him distrustful of the process by which they were attained, even were he fortunate enough to escape the exposure of their fallacy by the rough hand of experience—that merciless destroyer of mere theories. Missionaries in India especially, who are daily eye-witnesses of the falling to pieces of symmetrical deductions and unexceptionable chains of logical generalization from particular experience, should particularly be forewarned and self-distrustful in this respect. Our permanent settlement, sales for arrears, the annexation of Oudh, fixity of sub-tenure, are only some among the lamentable instances of the length to which the attractions of a plausible theory will carry well-meaning men, and the results which persistent over-riding of every obstacle, raised by different or altering circumstances, will produce.

The unfortunate circumstance, however, in this is, that often, if not generally, the consequences and the confession of error fall on others than the committers of it, and the example of great and esteemed men confessing their errors and their fallibility is lost to the world. The exemption from further demand, imperial or local, to the land-holder, was given by Lord Cornwallis; to tax the excess of his income beyond that fixed demand was reserved for Lord Canning; to lay upon him irrigation, road and school cesses, falls to Lord Mayo. And similarly with regard to "sales," which swept away the majority of a land-owning class and nearly bred a rebellion; annexation which did breed one; fixity of tenure, which, had Lord Lawrence's opinions been universal, would have sown the seeds of one; and many other lesser mistakes. The reparation and the wrong have rarely come from the same party; those who have done the mischief pass away ere it is detected, and the confession *peccavi* is consequently but seldom heard.

How full, then, of instruction is all this to the missionary. If self-confidence and inconsiderate jumping to immature conclusions are harmful in mere perishable matters, what shall be said of him if by the same error he imperil eternal interests? The weal or woe for ever and for ever of millions is dependent on his success, and his greater or less success on his choice of means. With what intense earnestness then, with what prayerfulness and self-distrust and humility should he weigh and select the weapons of his warfare, and how incumbent it is on us all to assist him with our experience in the selection, and bid him God speed in his choice.

Now, what are the objects of the missionary?

First.—To make known the glad tidings of the Gospel to all, and give to all the opportunity of learning the truth;

Secondly.—To organize and educate an earnest and aggressive native Church, by which agency alone the evangelization of the country can be hoped for;

Thirdly.—To maintain an affectionate watchful care over his congregations;—and to seek no one of these objects to the neglect of the others.

The reason for entertaining the first of the above objects is the inherent belief in the heart of every Christian that man, being the creature of the God of Christianity, needs the Christian's faith and hope, and nothing more or less, to satisfy the cravings of his heart; and whatever the devices adopted to soothe

and dull the unquellable aspirations, hopes and fears of the soul, true and perfect rest is not attained, but a void must always remain in the hearts of men, which Christianity alone can fill; and this void we must try and reach by giving to all the opportunity of learning that "gospel of Christ which is the power of God unto salvation to every one that believeth."

The reasons for the second object are patent. Even were it possible to maintain European missionaries in sufficient numbers to penetrate to all parts of the country and give to all the people facilities of religious instruction, numerous considerations connected with their constitutions and habits, their ignorance of the language and customs, their being foreigners and of the dominant race, would always render it impossible that by their agency alone, or even in a principal measure, the natives of India should be brought to the knowledge of the truth. The organization and education of the Church is moreover necessary for the Church's own sake, in order to conserve, and having conserved to make fruitful the results of the missionary's labour. Planting will be in vain without watering; and, through a healthy organization of congregations into self-supporting, active and aggressive bodies, the spiritual life of converts will not only be kept from decay, but be nourished and strengthened; the zeal of believers quickened, and their activity stimulated, united, and rendered efficient to the propagation of the knowledge of the truth. The Christians, instead of being content to lead a life of dependence and negative goodness, will be led to show, in lives of laborious usefulness, their "faith by their works"; and, while proclaiming on all opportunities the truths they have learnt, and showing in their lives the results of them, and in their eagerness for their neighbour's welfare the fruits of them, will refer all who will come to competent pastors for instruction in them.

The necessity for constant watchful care of the churches is shown by the example of Christian teachers in all time, and by our own hourly experience. Our Lord's very disciples could hardly be left to themselves with safety for a moment; every Epistle in the New Testament breathes the same spirit of warning, entreaty, reproach, argument, threatening—showing how perversely, in the earliest, most fervent days, well-meaning men went astray wherever and whenever they were left to their own devices. How many of our own converts too are a standing reproach to the Church. Planting and watering will both be of no avail, if there be not the protecting hedge of watchful care.

Such being the objects of the missionary and the reasons for them, we will proceed to consider the different cases of the subject on which they have to work. For our purpose the natives of the East may be divided into—*first*, those who are under the influence of English ; and *secondly*, those who are not so ;—and the latter again into Hindus, Muhammadans and aboriginal tribes—the Sikhs being regarded for all practical purposes as Hindus.

The first class, who may be taken generally to be Hindus, are not a promising subject for missionary effort. The march of education no doubt has in their case cleared the way to a certain extent, and shown the dogmas of Hinduism to be so untenable, even absurd, that the natural consequence has been a rejection of them. But one very result of this—of upsetting faith by reason—has been to make the *tabula rasa* of their minds, thus formed, unsusceptible of impression by the Christian religion, which especially must, in many of its doctrines, be accepted by faith only, and which, to the limited reasoning faculty of man, arguing necessarily from its own experience and powers of conception, *must* appear foolishness. Mental advancement has given to the English-speaking Hindu a knowledge and power of reasoning, which leads him to despise his own faith—and all others. The result is, with the herd, indifference and infidelity ; with the few, a groping after truth in the light of reason ; till, as must always be the case, the tendency and craving of the human mind to lean and believe, insensibly re-assumes a sway ten times stronger than before ; and the movement, like Muhammad's, like Nanuk's, like Ram Singh Kooka's, ends in the exaltation of its leader into something superhuman and infallible, and pays to him the honours of an All-powerful Mediator, that leader meanwhile accepting the position without disclaimer, for the reason that " Brahmoism is not a religion of rule which bids to do this or not to do that."

In regard to the Hindus of the second class, the difficulties to be encountered are totally different. Orthodox Hindudom (to coin a word) is, as a rule, exceedingly superstitious, and destitute of large and enlightened views upon any subjects—much less religious ones. The natural dread of the human heart to cut loose from the sheet-anchor of a faith ; the disinclination to give up cherished views and ideas—especially those on which man bases such hopes as he may venture to entertain for the unseen future ; the desperate reluctance of human pride to concede the inefficacy of " works",—all these, superadded to the special tendency of the narrow-minded, timid and ignorant Hindu to fear and magnify

some unseen motive power and influence behind that agency which is evident, will account for and explain the difficulties under which our Missions labour; and the appreciation of them will give an idea of the attitude necessarily assumed by the people generally towards us. Missionaries, in a word, have, in the ordinary Hindu population, to deal with a people who dread their power to disturb their own comfortable convictions, who misunderstand their motives, and are unable (without the free gift of the grace of God) to rise to the height of comprehension of their principles.

With regard to the Muhammadans the case is very different. No one can regard them as in the same state of ignorance and superstition as the Hindus. The absurdities and corruptions of their religion have long been the subject of animadversion by their own teachers; the portions of the Prophet's dogmata most repugnant to reason have been euphemised and explained away. "Jebādun wo kutulun" is no longer an injunction to crescentade and slay actually and physically, but to war against the world, the flesh and the devil. The "maaraj" is now regarded by few of the educated as an actual ascent into heaven, but rather, as hinted by Nizami in the introduction to the *Sikandar-namah*, as the vision of a night. The Wahhabi maxim of *Khair-ul-qubūr id-dawāris* (the best shrines are the ruined ones) is rapidly gaining ground, to the expulsion of that craving for the worship of the visible, which leads Jew and Hindu to "high places," and Roman Catholic, Greek and Muhammadan to shrines.

For the rest what is there in a religion founded on the Old Testament, and similar to that of the levitical law in such respects even as the ceremonies of the "passover" and of the "scape goat," *—a religion inculcating the unity of God, taking

* Amongst the numerous superstitious rites observed by the Eusufzais for the aversion of impending death, or in atonement for the soul hereafter, two are worthy of special note as being also Israelitish observances. In the one, resembling the "passover," a healthy animal of the herds or flocks is sacrificed, and distributed to the priests who sprinkle the blood upon the lintel and door-posts of the house to be protected. In the other, resembling the "scape goat," a similar animal is conducted round the house or village, formally loaded with the sins of the people, and then driven off beyond the limits to become the property of anybody who may seize it. Always in the case of sickness, the afflicted, according to his means, feeds the priests and poor, and sacrifices sheep and oxen as sin-offerings. This is also done after the commitment and repentance of any great sin; and similarly thank-offerings are made on recovering from illness, or escaping from any other impending calamity. All such offerings are generally termed *Kurbani* or "sacrificial."—*Report by Dr. Bellow.*

the same view of that God and of his prophets as did the ancient Jews, and only adding another prophet to the list, which should be repugnant to reason and education, or less sufficient to the human mind than the religion of the Old Dispensation was and is to the Jews and ourselves. We ourselves go a step further—we believe in the necessity of a Mediator and Redeemer; the first the Muhammadan has in Muhammad, the latter is distinctly repugnant to the human heart, which clings to “works,” and to the pride of reason, which laughs at the incarnation and passion of God.

Moreover, with an artful show of candour and superiority to all rivalry, Muhammad and his followers—so far from denying the existence, the divine inspiration, the death, resurrection and eventual return to judgment of our Lord—fully admit all these facts with profoundest reverence, place him above all the prophets and men of God, look with hope for his second advent, preceded by Elias, the Imam Mahdī, carefully avoid even subordinating him to Muhammad himself, but deny only his Godhead, and turn with horror from the impious theory of the immaculate conception, as an idolatrous and deadly heresy. And truly it would be wonderful were it otherwise. Is it by education, by cultivating the reasoning faculties, that power is to be given to the heart to lay hold by faith on these tremendous mysteries, at which Christians from the earliest days have staggered, and the contemplation of which must be, to all but those who have attained that highest knowledge that they know nothing, a stumbling-block and cause of offence? Emphatically no! Love must precede faith; and the heart which yearns with longing for the beautiful side of Christianity, will not be long ere it unquestioningly accepts that other which is dark and mysterious.

No doubt the life and character of Muhammad and his teaching do not satisfy the idea of thinking Muhammadans; and the result is a conception which we have met floating through many works, but nowhere perhaps so clearly defined as in the sonnets of “Urfi”—of a spiritual Muhammad, pre-existent to the world, and to a certain extent the “logos”, though not the medium of creation. This spiritual Muhammad, incarnate for a time and subject to the errors and infirmities of the flesh, is now again the spiritual Muhammad, the favoured creature of God, superior to the angels, and the potent mediator for all true Muhammadans, whom he will receive into a paradise where

the houris* are symbols for beatific visions of God's perfection and the wine is the intoxication of His Name.

The Wahhabis, on the other hand, get over this difficulty by reducing Muhammad to the status of Luther and Calvin, acknowledging in him merely the earnest reformer of their faith to the pristine purity of "there is no God but God," and ignoring the latter portion of the Muhammadans' creed, "and Muhammad is His (only true) Prophet." Pharisees of the most repulsive type, they have little distrust of their own shortcomings, little thought of Mediator or Redeemer. Like them, by their tradition they make, not their law only, but the natural law of the heart, of none effect. To smoke tobacco is one of the greatest sins, while fraud and adultery are comparatively venial. An eye for an eye, a tooth for a tooth, a life for a life—and with the formula "in the name of God most merciful and kind" on his lips, the next of kin amid applauding multitudes will cut the throat of the slayer of his relation, with the strictest adherence to all the forms prescribed by tradition for taking life from the creatures of God. These deists, strong in their faith, and secure in their imagined favour with God, look with scorn upon Christian, Muhammadan, and all other religions, which lean upon anything, or anybody, short of him. Christians of the Roman Catholic and Greek Churches, who adore crucifixes or pictures; Sunnis who treasure with enthusiasm a relic of the prophet; Shiahs who commemorate with yearly recurring tears the heroism, the despair, the death of the sons of Fatima—all these, to the Wahhabi wrapped in the garment of his self-imputed righteousness, are idolators and dogs wandering hopeless and ignorant in outer darkness. Is education likely to do aught but strengthen this?

In dealing with a religion where truth and error are thus dexterously commingled, where God's justice is lost sight of in His mercy, and the necessity of a Redeemer therefore unrealized, it is evident that experience drawn from contact with Hinduism, either enlightened or gross, is entirely at fault; and the method suitable in one case may utterly fail in the other.

With the non-Aryan tribes these difficulties do not exist; more degraded, there is less haughty pride and prejudice to humble; more ignorant, there are less inveterate and confirmed beliefs to uproot. Their gross superstitions sit on them very lightly, and their docile natures render them accessible to

* The Arabic word *hûr* is the anagram of *rûh* which literally means spiritual essence.

the truth. Their minds are comparatively *tabulæ rasæ* open to all impressions, and on this virgin and fertile soil little is necessary but to cast the seed.

Two portions of our task are now disposed of, though in a manner necessarily very cursory; the third and most difficult remains, *viz.*, to deduce from this definition of the objects, and description of the subjects, of missionary efforts, satisfactory conclusions as to the means to be adopted to gain our ends.

First and foremost, in the estimation of many Indian missionaries, of means for the propagation of the gospel and diffusion of Christian knowledge is the education of the masses; and a tendency exists to disparage, in comparison therewith, the practice of preaching, or, as it has been termed, "expending the energies of missionaries and the funds of the Church in comparatively futile verbal efforts for the "conversion of individuals"—somewhat in disregard of the fact that such at any rate was the method of the apostles and early fathers, though no doubt with capabilities and facilities vastly superior, and under circumstances somewhat different.

The arguments in favour of this method of carrying out the first object are numerous and cogent, but have been so frequently and ably urged in previous publications as hardly to require recapitulation here. They point to the necessity of gradually sapping superstitions by education, and thereby "preparing the minds of the young for the reception of an intelligent faith in the Gospel," and of giving a religious tone to the utterly ungodly secular education which the Government agency is sowing broad-cast through the country; they show that schools, like parishes, are always under Christian influence, which must eventually lead to good, and they urge the necessity of gradual development, and the superiority of organized and steady effort and progress to a desultory and indiscriminate proclamation to unwilling ears of gospel truths, which too often resembles beating the air.

To these arguments in exaltation of education in comparison with more direct and immediate efforts to disseminate the truth, another party reply; and their positions being less generally known, we will give them in detail:—

First.—That the arguments summarized above are unsound in themselves.

Second.—That, if true, they are so only of a section of the population, and the result of a particular experience, and are not, therefore, of general application.

Third.—That, even were they generally true, the method advocated fails to satisfy all the conditions of the missionary's undertaking, or to allow for the due performance of the second and third objects, which are equally important, and, in fact, bound up with the first.

In support of the first position, it is urged that schools and education in its popular sense as primarily the instruction of the young in schools, fail greatly of their object as evangelizing agencies, (1) as being a circuitous and unopen method of communicating the truth, (2) as bringing the motives of missionaries into suspicion, and raising up the spirit of opposition, and being, for this and the previous reason together, an inefficient agent of evangelization, and (3) as wasting the missionary's time and strength, weakening his faith and earnestness, and lowering his aims.

It is self-evident that the difficulties before described as standing in the way in our dealings with the Hindus of the second class particularly apply to attempts to reach the young through the instrumentality of schools; consequently, if the missionaries are to make any progress in this department of their work, a compromise on both sides is necessitated. Let us see what these compromises are, and whether they are consistent on the one side with common honesty, or on the other, with true Christian practice. First, take the case of the pupils. By whom are our Mission schools attended? Setting aside, of course, all Christian children, native or others, and the orphans under care of the missionaries, it is the case now (and will be much more so when Government, as is proposed on financial grounds, makes its own colleges and schools to a much greater extent than at present self-supporting) first, that only those attend the Mission schools who cannot obtain the same or as good an education, on the whole or in any particular branch, elsewhere; or secondly, those whose parents rely on some one or more of the heathen teachers employed in the school; or lastly, those whose parents are unthinking and indifferent, and are content to follow the popular road, not knowing whither it tends.

By the first the compromise made is great; they run the risk of hurting their souls (as they regard it), and of having their faith undermined for the sake of the worldly advantages which a certain knowledge gives them. They do this, however, in a self-reliant and defiant spirit, determined in their own minds that, while gaining their own ends, they will yield none of their opinions. And this they do not hesitate to show

individually when anything pointed is said which rouses them, as well as collectively when a more than usual display of the motives and objects of the teachers is made, such as the profession of Christianity by one of the scholars gives rise to. The second class are distinctly caught by guile, the guile of the teachers who thereby gain a livelihood, teachers moreover who in reality, while their use is unavoidable, greatly counteract the influence of the missionaries; and the last section are taken unawares, and as it were entrapped in their unthinking and indifferent state. In every case the minds of the pupils are in a most unfavourable state for the reception of the truth; all, did they define their views to themselves, would be found to agree in looking upon the schools as traps set to catch them—traps which they pride themselves on their ability to defeat, while possessing themselves of the advantages with which they are baited. And all are ever ready to raise with the multitude the cry of "Away with Him, away with Him," when their feelings are roused by any act which clearly displays the true motives of their teachers.

Now, let us examine the compromise made by Christian teachers in their efforts to collect and keep together their scholars. Is it not made by keeping in the background in a great measure their motives and objects, lest the fear of their scholars should be too violently roused? It is no doubt wise and lawful, as the apostle enjoins, not to feed babes with strong meat, but this injunction must be held to refer to doctrine rather than motives. The apostle hid from no man his object in addressing him, and his wisdom in dealing with the men of Athens on Mar's Hill consisted, not in hiding his intentions, but in using what they knew to introduce them to something higher and better on which to ground their faith and hope. Again, Christ Himself has told us to be wise as serpents and harmless as doves, but there is a danger of going too far with the wisdom of the serpent and falling into the error of the Jesuit. Teachers cannot but feel that, if they make known boldly and plainly that their object in teaching is nothing less than the individual conversion of the scholars under their care—a conversion not of word and lip only, but of and in the heart, the number under their instruction would very quickly decrease. It is this which keeps the Bible out of Government schools, and must it not be suspected that the dread of this—a result so prejudicial in many ways (both personally, and as regards the credit of their Society and their work) to the missionaries who ground their hopes on education, may cause the Bible, and

religious instruction generally, to be practically, in a great measure, put on one side in many schools and colleges? It is to be feared that the profession of our faith and our object is kept by motives of expediency far more in the background, in most schools, than the missionaries would like to admit even to themselves. And yet no lower aim than that mentioned above is worthy of Christian missionaries, nor can it ever be right for a minister of the gospel to be satisfied with less. It was not so with St. Paul who "laboured as in birth until Christ should be formed in the souls" (not merely superstition conquered in the minds) of those whom he addressed.

Schools no doubt are, like parishes, brought under a Christian influence, the result of which is frequently displayed in the most gratifying manner. But it is to be doubted whether experience does not show that the influence leading to enquiry and conversion in such instances, has been personal on the part of the teacher; and it cannot be supposed that the position of suspicion and opposition, naturally assumed by the pupil in his early relations with the teacher, as before explained, must not originally have militated against the exercise of this influence, which has afterwards worked its way in spite thereof.

On the one side no doubt there must have been the state of preparedness, specified in the commencement of this article, as the foundation on which our dearest hopes rest,—the craving of the human heart for higher things—

"The desire of the moth for the star,
Of the night for the morrow;
The devotion to something afar
From the sphere of our sorrow."

And to the other the opportunities for reaching this were afforded by the close relations entailed by the state of pupilage. But to these very opportunities a neutralizing agent exists—the subjection of the pupils' free will consequent on the fact that they must accept their instruction with its displeasing concomitants; which is as if the Famine Relief Committees, in giving bread to the starving, had insisted on cooking it in some manner repugnant to their prejudices. The masses are hungry for the education which they see is their only chance of getting bread, as the famine-stricken wretches were for bread itself; the Mission Societies are no more bound to supplement the Government efforts to supply this want, than the charitable public were to aid in the relief operations; but, in either case, to do so, and to attach unpalatable conditions, is practically to abrogate the free will of those, who by the law of nature *must* accept the relief, and

therefore have no option as to accepting its conditions. The parallel does not of course hold good throughout, for the conditions fixed by the missionaries are right and necessary ; but it is sufficient for the support of our position, that the free will of the pupils is to a certain extent abrogated. Now, as men shall be judged individually, and are responsible to God and Him alone for their acceptance or rejection of what is strictly a matter of faith, anything which hinders the free exercise of their wills acts as a hindrance to their faith.

Some earnest men go still further than this, and dispute the necessity of education at all "for the gradual sapping of superstitions, and thereby preparing the minds of the young for the reception of an intelligent faith in the Gospel." They ask what there is so peculiar in the notions or institutions of the people of Hindustan, which necessitates in their case a process different from that by which all Christendom has been evangelized. What bigotry can have been fiercer than that of the Jews, what superstition grosser and more depraved than that of the Romans, what ignorance deeper than that of our own forefathers, Britons, Germans, and Vikings? But with none of these was education deemed necessary to prepare their hearts for the truth, though controversy *was*, as may be seen throughout the *Acts* of the apostles, who "teach and preach," "dispute," and "out of the Scriptures mightily convince," in every episode of that instructive and spirit-stirring history. And what is more incompatible than controversy with education? Or what could be more out of place in a school?

Education by schools has been adopted, in most instances, not so much because it is a good means of making known the Gospel, as on account of certain characteristics of the superstitions and social organization of the country, which must be removed before the gospel can be hopefully preached to its people. In other words, simply to preach the gospel, or to communicate the message of mercy to the people of this country, in their present circumstances, is a "futile verbal effort". Whereas the Word of God teaches that the gospel is "the sword of the spirit," "quick and powerful, sharper than any two-edged sword" of man's devising, "piercing even to the dividing asunder of soul and spirit," "a discernor of the thoughts and intents of the heart" of whatever class or nation. It is *the* weapon of God's people's warfare, "mighty through God to the pulling down of strongholds," whether of hoary superstitions or social organizations. It does not require the

engines of man's devising to break down and prepare for it easy conquests, it is itself the "power of God" for this very thing; nor is there anywhere the slightest intimation of any circumstances so peculiar as to render a roundabout and gradual introduction of its precious truths anything but superfluous. The practical result, moreover, of school education, is that, while in removing the Hindu's superstitions it still brings him no nearer Christianity, the effect is to put secular instruction in the place of the "Word of God," depreciating the latter which depends on the faith of the heart, and exalting in its room the pride of the intellect; and also to arm the faculties of unbelieving cavillers with weapons with which to argue against us, and to turn to ridicule those ignorant converts, whose hearts we have been the instruments of turning, but whom we fail fully to instruct how to give a reason for their faith. This last allusion, however, bears on a point better considered when we come to the examination of the third position assumed by the party who demur to the uncompromising exaltation of education at the expense of other evangelical labour.

So much for Hindus of the second class, the mass of the population of Hindustan proper. With regard to those under the influence of English, the very description we have given of the mental state produced in them by education, appears to us to forbid the hope that education alone will bring them to a knowledge of the truth. A section of them may be regarded possibly as in a state of virtuous abandonment, more accessible to spiritual influence than when imprisoned in the unimpressionable shell of superstitious ignorance (though far more, we fear, are enveloped in the *œs triplex* of rationalistic self-sufficiency); but, if so, how vain to talk of leaping into the "deep waters" to aid those who are "struggling into conviction from the chaos of thought," and then merely to give them the straw of finite human knowledge to cling to, instead of drawing them to the firm shore of the Christian's confidence by the threefold cord of faith and love and hope.

The fact is, that many who insist with iteration on the necessity of gradual development, as recognized in all the divine operations—a fact undeniable, and no way alien to Christianity, *when once the seeds of it have found place in the hearts of men*—fail to bear in mind sufficiently the postulate, that the germinating power requisite to the growth of Christianity in the heart is God's, and that after a spiritual and even miraculous manner. While the *progress* of this growth is gradual, the vivification

of it must be an instantaneous process, and the *immediate* work of the Creator resultant on our delivery of His message to the soul. To lose sight of this miraculous power, exercised directly by the Most High, is to dishonour God, emasculate His truth of its power, and so weaken our own faith that, unless we rest upon some other confidence, our hands hang down. Such confidence then we are apt to place in schemes of man's devising, from which we are led to assume for Christianity an inherent power, bestowed upon it once and for ever by God, in place of realizing that all its life and power to influence the heart, is derived from the instantaneous interference of the Author of life.

It appears to us that those who, from the state of preparedness specified above as produced in some persons by education, argue the universal advisability of trusting to gradual development, ignoring meanwhile the primary necessity of God's direct agency to implant the germ which is to be developed, have not sufficiently allowed for the universal state of preparation of every human heart, which was described at starting as the foundation of our hopes of evangelization, and which places educated and uneducated on an equal footing for the reception of that first germ, for which we must look to God alone.

Such is a summary of the arguments of the party who less unreservedly favour education as an agent of evangelization, in amplification of the first and second heads of objection urged in support of their first position; and, though stated more expressly with reference to Hindus, they apply with much greater force to the other two classes, as will be seen further on. The last head of the objections to schools has been glanced at already in preceding passages of this paper; reference has been made to the unworthiness of the compromises necessitated, the risk of holding back religious instruction and the Bible, when these are found to militate against the success of the school, the weakening of the missionary's faith in God's support, and the leading him to trust too much to human agency, the over-inclination to the wisdom of the serpent, and the tendency to be satisfied with lower results than the birth of Christ in the souls of those among whom he works.

The party whose views we are discussing also object to Mission schools, because they occupy with secularities, secularize the spirit, and waste the strength and the time of those who were ordained to publish the gospel. Hours of every day must be spent in imparting purely secular knowledge, in superintending

the several schools, keeping accounts, and attending generally to the various duties falling to them in their position (a position actually disadvantageous for their success in dealing with Orientals) of *Burra Sahibs*, important officials at the head of large educational establishments, with money, patronage, interest, and, generally, many of the good things of this life in their gift. Returns, accounts, correspondence with the Directors of Public Instruction, all in the missionary's own hand; these, and the endeavour to shew great results in comparison with Government schools, are the clog and the bane of a missionary's energies. As all the schools are aided by Government, and have consequently adopted the Government course of instruction (which takes no account of religion), consequently most of the hours of study must be devoted to purely secular lessons to keep up to the mark of the Government schools, and religious instruction is thus pushed into a corner. How can men, whose time is thus filled up, and energies exhausted, obey the divine mandates, "Give thyself wholly to these things," *viz.*, "reading, exhortation, and prayer," "Preach the word, be instant in season, out of season," &c.

They further object to the schools, because in many cases the missionaries come to regard their schools not as means but as ends. That which a man gains his credit and his bread by, that which is the employment of his life, becomes his end and aim and object; and this is, practically, not the diffusion of Christianity and the glory of God, but—a successful educational system.

Missionaries are thus tempted to think that they have been successful in their work, when in fact they have had no real success. No doubt a great work has been performed by them; flourishing schools have been established, and are being carried on; they are greatly aiding in the civilization and increase of the material prosperity of the country, and have thus deserved well of the State, and earned well-merited commendation. But this was not *their* work, it was not what they were sent to do, and, meanwhile, there may not have been one person brought to the saving knowledge of the truth, or even hopefully impressed. There is danger in this to themselves, danger to the tone of the Missions; danger, we repeat, in aiming short of what alone should satisfy the ministers of Christ—the conversion of souls, and being content with what is in itself a noble work, *but* not the missionary's work—*his* labour is too precious—the elevation of the masses.

This closes the argument in support of the first position. Whether that position be considered to be proved or not, the writer, a layman, with but little personal knowledge of the work among Hindus, is diffident of pronouncing, but there can be but little doubt of the truth of the second position. The arguments against secular education with regard to Hindus of both classes, so fully discussed, apply with equal force to Muhammadans of both classes; while the detail, previously given of the mental and religious status of the latter, will, we think, be conclusive against the application to them of experience obtained in favour of education amongst Hindus.

Unlike that of Hindus, the Muhammadan creed does not clash more with modern science and discovery than our own; nor is there anything in their sacred books, based, as before said, on the Old Testament, to be upset, as in those of the Hindus, by the acquisition of the rudiments of the knowledge of the present day. With them, as with us, sophists anxious to bring down everything to the standard of their own finite reason—but with this difference from most of our wise men, that their efforts have not been devoted to proving their scriptures to be at variance with science, but the reverse—have fallen into endless labyrinths of fruitless argument, only to be appreciated by the study of their controversial books and glosses.

Take, for instance, the description of the creation. In the Quran it is written that the whole universe was created by the one word "*kun fayakun*" (be); but Muhammadan science declares that God is a spirit or essence, unique in substance (*basít*), and capable, therefore, of but one effect, not of several as displayed in the universe; like fire, which can but burn. The glosses, therefore, explain away the discrepancy by the hypothesis of the '*uqúl-i'-ashrah*, the ten attributes; that is, they say that God by the word "be" created the *jauhar-i-'aql*—the original attribute. This was not of an unique nature, but combined of two, creature and creator (equivalent to the "logos") and capable, therefore, of *two* effects. The *jauhar-i-'aql* thus created two further attributes, which created four, and so on. Puerile all this no doubt, but still displaying a knowledge of elementary truth and facility of false deduction, rendering their masters little liable to be posed by even the admission of the elements of European science.

Consequently the Muhammadan faith will not, of necessity, (from a human point of view) be disturbed by any amount of secular or even religious instruction which they may receive,

unless it be controversial, which, as before said, must be utterly foreign to the system of school education, into which even the study of distinctly controversial books could hardly be admitted, without raising those hostile and angry feelings which the whole object of the system is to avoid. With the Muhammadan then particularly and superlatively, as it appears to us, is a system of school-education quite inapplicable for the purpose of evangelization: what is suitable, we will explain when we come to treat of what we regard as the natural order of the missionary's duties.

As regards the aboriginal and non-Aryan tribes, we believe that little or no difference of opinion exists. Their favourable state for the acceptance of the truth has been described above, and experience has shown that preaching *per se* has the first place as a means of reaching them. Witness the success achieved amongst the Southals and Kols by evangelizers, who went amongst the people, not with the grammar and geography *in the first place*, but with a simple statement of the truths of God; and whose whole efforts were devoted to reach and satisfy that hidden appetite and void of the human heart—an appetite equally existing, equally to be awakened, equally to be satisfied, in God's souls of *whatever* class—which the truth alone can fill.

The arguments in support of the third position are those already given under the last head of objections urged in support of the first position, and they appear to us to be sufficient. If the missionary's time and energies are taken up with the schools, as therein detailed, he can have but scant leisure to organize his churches and administer them, to watch over the individual welfare of the members, to employ them usefully, and to train up instruments for the work from among their numbers; nor, if the missionary's aims and objects are lowered, as anticipated in that portion of the discussion, is he likely to be so deeply impressed with the importance of these matters as to *make* the leisure for them. Nevertheless their urgent importance, no whit below that of the initial work of evangelization, can hardly be under-estimated, on a consideration of the arguments brought forward in the earlier part of this paper regarding the three objects of missionary enterprise.

We again assert that so costly and inefficient is European missionary labour, that the evangelization of the country can never be hoped for through their agency, and that it is their work to train agents for the purpose. And also that so peculiar

and difficult is the position of the native congregations in this country, and such the disadvantages inherent in their own condition, that, without parental solicitude and watchfulness, there is constant danger of the spiritual deterioration of individuals, and the arising of scandals in the Church.

This closes the negative argument on the third great head of our subject—"means"; and it appears to us to have been fairly shown that education has not, at any rate, *all* the advantages which the party unduly exalting it would lead us to believe; certainly not sufficient of them to warrant any man in giving up the preaching of the gospel, the training up and organization of the native converts into an aggressive agency, and the watchful care of the churches, to apply himself wholly or mainly to education. We will now consider the last portion of our subject—What the missionaries' method *should be*.

First and foremost, they should preach the gospel—preach it to every human being, old or young, rich or poor, learned or unlearned. They should preach it, believing it to be the efficient means appointed by divine wisdom (the gospel being "the power of God" and "the wisdom of God") for the conversion and sanctification of the sinner; should preach it *believing* that it will convert souls, will prosper in the thing whereto it has been sent; should preach it praying and waiting for and *expecting* the conversion of sinners; and preach it lastly by example, in self-denying, loving, holy lives. For preaching is not, as asserted in a recent number of this *Review* (No. 96, p. 136) the mere enumeration of theological dogmas; and we deny that this is a true exposition of the practice of the majority of Christian preachers. True preaching is not a dogmatic statement of the truth, but it is doubtless, a "suggestive one," and the illustration given of our Lord's teaching (p. 131) is well suited to encourage *preachers* to use this mode of instruction.

True preaching includes exhortation, religious instruction, demonstration, and controversy, whether with the tongue or pen; and it consists, moreover, not only in writing or saying the truth, but in *living* it. The sum of Christianity, and hence of all human happiness, is in being God-like. As there is no limit to a man's opportunities of doing good, so there is no limit to his influence for good, if he is a living exposition of the faith which he professes. Let Christian men do all the good they can, let them follow in the steps of their most blessed Lord, who "pleased not himself"; and let them do this, not of constraint,

but willingly and joyfully, as he did; and let them, European and native, embrace every opportunity of explaining, humbly and unostentatiously, the foundation of their hopes and the spring of all their actions; and then they will *all* be powerful preachers of Christianity. And here is a strong argument in support of education as an accessory in the work; and when not carried to the extent of swallowing up the whole time and energies of God's ministers, Mission schools, like Mission poor-houses or any other spontaneous efforts at benefiting the people without thought of advantage, display alluringly the beauty of holiness, and prove the excellence of the religion which prompts such acts; always remembering, however, that there is no religion but *inculcates* such, and that neither Hindu nor Muhammadan falls short in beneficence according to his light. What *we* may make our own is to pass our whole lives in ceasing not to do good, and thus to publish the gospel of Christ by a course which the spasmodic, calculating or vainglorious benevolence of the unbeliever would very seldom adopt, for actions which all can see, and motives which most can guess at rightly, are far better understood by the masses than any learned arguments. It is needless to enumerate what these actions ought to be; they ought to make up the life of every man who calls himself a preacher of Christianity, and are as extensive as human feelings, wants or woes.

Among other efforts to benefit the people, and thereby give practical proof of the excellence of the religion which teaches to love our neighbour as ourself, none is so likely to come immediately home to the recipients of the benefit as attention in sickness, and none affords the missionary such openings for the exercise of personal influence and unobtrusive imparting of saving knowledge. We are led to this consideration by the perusal of a report, furnished by a native doctor who has devoted his skill and energies to this work, and has been established in a dispensary by the Church Missionary Society on the wildest, most lawless and unsafe portion of our border—the first experiment of the sort. He writes, possibly in unconscious quotation (with slight clerical correction we give his *ipsissima verba*):—"Jesus, the embodiment of the gospel spirit, commands his followers to imitate him in labours for the present and eternal welfare of mankind. He knew man's heart with its prejudices and weaknesses, and therefore those means which he found best to draw man to Himself ought to be used by his disciples. Jesus went about all Galilee, teaching in their

“synagogues, and preaching the gospel of the kingdom, and healing all manner of sickness and all manner of disease among the people, and his fame went throughout all Syria. The fame of his healing, more than of his preaching, went throughout all the heathen land, and they brought unto him all sick people that were taken with divers diseases and torments, and he healed them, and there followed a great multitude from all directions. Here Christ gave this example to use the power of healing, and (after the apostolic age, when there was no more the miraculous power) to make medicine the pioneer of the gospel, which has proved exceedingly successful among all ranks and descriptions of people, and is evidently rich in opportunity even among these wild Wuzerees for healing and removing prejudice, and to level mountains of difficulty, and to unfold the truth as it is in Christ.

“Tank is in the centre of many villages. * * During the month several times the hill tribes bring the produce of their rocks and valleys; * * during the winter there are many villages of Povindules† yearly erected. Here is a very great, responsible and open field of labour for a medical missionary, when round him come Povindules, Wuzerees, and others for the relief of their bodily sickness, and while they are attended medically, hear also the word of God, and his great plan of redemption, which was for them a far and a hidden mystery, whereby the word of God may go forth in those mountain fastnesses which have heard no sounds but of war and bloodshed. I met with a few contradictions and bitter oppositions, yet I had many intelligent and, I trust, truly anxious enquirers among Wuzerees who frequently visited me. One of them, who is a Wuzereee Mullah who has some influence in his tribe, visited me several times with the gospel given to him, took off his straw sandals, and read reverently the Scriptures to be expounded more fully by me. Thankful am I for the encouragement God has given me, and my prospect of usefulness. My dispensary is deeply interesting. Every opportunity is afforded of gaining medical experience—plenty of practice, rather too much at a time.

* * * * *

“In my experience they seem more open to warm-heartedness and friendship. It is a circumstance full of encouragement

† The tribes of wandering merchants, carriers and graziers, in whose hands is the bulk of the Hindustan-Khorassan trade.

"and hope too, that the Nawab of Tank takes personal interest in the progress of the mission hospital, and I trust that I found him of a higher view of the character and the works of Christ than is common among Muhammadans, and is an intelligent enquirer, and I believe since I gave him a copy of the New Testament, he studies it carefully." * * *

Writing the truth and living the truth are the more to be regarded as an important means whereby the missionary may promulgate the Gospel, as there are various reasons glanced at in the discussion of the second object of missionary endeavour which render it more difficult to preach orally in this country than elsewhere; and the partial manner in which such preaching is done, consequent, more or less unavoidably, on those reasons, is probably the cause of its being regarded as nothing more than a detailing of theological dogmas. In the first place the climate is to a certain extent against the missionary, and prevents that constant intercourse with the people almost necessary to a successful preacher. They have to be careful of themselves, for they belong to Christ, and have fitted themselves, with great expense to their Society and labour to themselves, for His work; they cannot be easily replaced, and must not be lightly wasted; and therefore they have to run out as it were, deliver their message, and fly in again from fear of that great enemy of their constitutions—the sun; so the time spent amongst the people is necessarily short, and is very frequently employed chiefly in answering arguments on points of doctrine.

As before stated in the argument on the last head of objections in support of the first position of the anti-education party, the position and power of the missionaries disqualify them for intimate relations with the mass of the people. The habits, again, of Europeans are so different from those of Orientals, that few can try, and much fewer succeed in being one of, and living amongst, those whom they would influence, which is nevertheless a *sine qua non* to the success of the evangelizer's work. If missionaries were released from the burden of their secular duties, much more might and would, no doubt, be done to this end by cutting loose, as far as consistent with health, from their European surroundings and habits; and feeling and acting, much more than can now be the case, with the understanding that their grand work is for and amongst the natives, and that it is not their object to know or be known amongst the European community, however natural, pleasant and profitable such intercourse may be.

Native Christians, again, who might and ought to do all these things fully, are too prone to follow their pastor's example; nor indeed, as before explained, does the present system leave the pastors free for their main task of qualifying the native Christians for such independent work. And thus it arises that our religion alone in the earth has no "faqirs," "gurus," "murshids"—which is what, in this view, is really meant by missionary—to secure to it the sympathies of people to whom a true faqir, of whatever denomination, is an object of reverence:—such were the apostles, such was Xavier, such have been some of the Roman Catholic missionaries, "of whom the world was not worthy."

What we say then is, let European missionaries act in this manner, as far as they prudently can, themselves; and let them by all means in their power foster the spirit of zeal and self-denial among their native brethren; that thus the converts themselves may become converts indeed, as described in the earlier passages declaring the second object of missionary endeavour, not expecting a comfortable life, or that their pastors must provide them with a suitable livelihood, but realizing that with those pastors they must throw in their lot, and "through much tribulation enter into the kingdom of God." Then would the blessed and all-powerful work of preaching be no longer stigmatized as a useless, or comparatively useless, means in the work of evangelizing the thousands of India.

But we must go further in preaching than mere explanation of our views, or exhortation, or religious instruction, or example; we must demonstrate and controvert, and, by silencing those who are acknowledged champions of their faith, gain the ears of the multitude who follow them. Now, this is a very difficult and delicate task. Witness the treatment it continually entailed on those attempting it, as described in the *Acts*. To seal our faith with our blood is impossible in this country, or even to undergo any fiery persecution; were this possible, the effect of observing how Christians can rejoice to be "counted worthy to suffer shame for His name," might compensate for the angry violence of feeling aroused against "that way"; but not being so, to inflame the passions of our hearers is not the way to facilitate the acceptance of our words; and disputation, which, as before pointed out, is utterly unsuitable in school education, even through the vehicle of controversial books, is an engine to be most cautiously used in oral preaching, at any rate so far as such argument goes beyond

demonstrating the grounds of our own belief, and proceeds to attack that of our hearers.

But we would claim for preaching every species of religious or secular literature of a religious character, by which the truths of Christianity are explained to the people. And here comes in the tremendous engine which we have to aid us in the work in the use of the press ; by its means the missionary, overcoming all the disabilities detailed under the head of the second object of missionary endeavour, can calmly and dispassionately reason out and demonstrate truth and attack error, with a fair and sufficient chance of being calmly and dispassionately heard. He can pour out in burning periods, in English or in vernacular translations, the passionate exhortation of which his halting tongue, in oral preaching in a strange language, fails to relieve his overcharged heart ; or which, in English, would fail to be understood by the great majority of his foreign hearers, even though possessing some acquaintance with our tongue. He can, through the medium of translations, publish to the Oriental world all that is lovely and enchanting in religious writings and the histories of the great and good. But all this, only if some portion of his time, at all events, is relieved from the drudgery of secular business ; of drudgery itself there will always remain enough in accounts, reports, the care of the churches, and the education which is requisite after conversion to build up the church, and to render its members more able and useful for the propagation of the faith, and the assistance in their turn of their teachers in the instruction of others.

And now one word in conclusion with reference to those disadvantages pointed out as entailed on the teacher in his endeavour to influence his pupils, by the suspicion and opposition created by the relations of pupilage. In preaching, oral, literary or exemplary, this difficulty does not exist. The scholars do not come of their own free will *to hear of and learn about Christianity*, but hearers of the preacher are bound by nothing but their own free will as to whether they hear or not ; they know while they listen to him that he is openly aiming at their conversion. Consequently, arguing the converse of the proposition brought forward under the second head of objections urged in support of the first position of the anti-education party (so to call for shortness men who merely deprecate an *entire* devotion to education), these free-will hearers are more open to the reception of the truth than the pupils of the schools.

- ART. VII.—1. *Véronique. A Romance.* By Florence Marryat (Mrs. Ross Church), Author of "Love's Conflict," "Nelly Brooke," &c. In three volumes. London, 1869.
2. "*Gup.*" *Sketches of Anglo-Indian Life and Character.* By Florence Marryat (Mrs. Ross Church). Reprinted from "*Temple Bar.*" London, 1868.
3. *Nirgis ; A Tale of the Indian Mutiny ; and Bismillah ; or Happy Days in Cashmere.* By Hafiz Allard. London, 1869.

IT is perhaps not very remarkable that so few works of imagination, based upon Anglo-Indian society and manners, should be found to possess any considerable merit. India is by no means a favourable field for the cultivation of the imaginative powers. Writers of ability in this country would seem to eschew the sweet vagaries of fancy, and insensibly betake themselves to the tamer paths of common-place realities. Prosaic facts are dearer to them than the most inimitable creations of the imagination. In history, antiquities, and, above all, on politics we have writers enough and to spare ; the talents of some of them would be acknowledged anywhere, though the productions of many are doubtless as dry and uninteresting as the "Old Indian" himself is usually represented to be. But few of our authors are tempted to wander away into the realms of fiction, and if they do, the result is generally a miserable failure. The best pictures of Anglo-Indians and their peculiarities have been drawn by writers in England. *Jos. Sedley* and *Colonel Newcome* will remain types of the Indian official, as long as the English language lasts. They represent him under unfavourable circumstances and out of his proper element, and oddities of character are, perhaps, unreasonably distorted ; but clever and amusing as they are, they would scarcely have been as universally and readily recognized as they have been, were there not a solid substratum of truth underlying the humorous description. To see the Anglo-Indian, however, and his manner of life in his adopted land, we must look to Indian writers, and it is to be regretted that none as yet have succeeded in painting a single portrait which has the remotest chance of surviving its author. There is still a fair field for a good Anglo-Indian novel ; repeated failures have shown the difficulties of the task, but still it is not altogether hopeless.

The past quarter has seen the publication of two books of this nature, which we propose to examine in the present notice. In both cases the writers have been in India, and one of them at least is not unknown to fame. Florence Marryat's tales have often ere now amused the novel-reading public, and *Véronique* is certainly not the least interesting among the creations of her fancy. It is indeed a delightful romance, and is well fitted to beguile the tedium of a sultry afternoon in this climate. We wish we could say the same of *Nirgis* and *Bismillah*. Hafiz Allard wisely conceals his true name, and if he ever becomes famous, it will probably be in a manner which will add neither to his self-complacency nor to his purse. We shall treat each work on its own merits; only we consider an apology is due to Mrs. Ross Church at the outset for having included *Nirgis* and *Bismillah* in the same category with her own charming little book.

To begin with *Véronique*.

The story opens with the arrival at the Ootacamund Club of the Honourable Captain Gordon Romilly, Aide-de-camp to the Governor of Madras. Captain Romilly is a vain, weak, and *blasé* young scion of the aristocracy, who has been relegated to India as a punishment for certain youthful follies committed in England, and who has consequently conceived the most utter dislike to the land of his exile. At the club he meets an old friend in Captain Romer, and in the course of a drive they take together, we are introduced to a poor missionary's family which has been thrown into distress in consequence of an accident by which the eldest daughter has been killed. The heroine *Véronique* here appears upon the scene, and conducts herself as though (to use Romilly's words) she were the only one that had her wits about her. Next day Romilly joins a shooting party, and he and his companion lose themselves in the pursuit of ibex, and are only rescued late in the evening by fortunately meeting with a young native Christian who is driving home some stray cattle. This man, David by name, takes them to his home, which proves to be the abode of a Jesuit missionary, Père Joseph, the uncle of the orphan *Véronique*, whom he has brought up from childhood. David is her foster brother, having been rescued by the missionary when exposed on the mountain-side, and the picture of these three living together in rustic simplicity and Christian faithfulness in one of the most pleasing in the book.

The guests are prevailed upon to pass the night at Père

Joseph's homestead, and the occasion is noteworthy in the story as being the first on which Romilly exhibits that weakness of character, which makes his whole connection with Véronique so unfortunate. Imitating her action when she crosses herself with holy water, he is at once mistaken for a Roman Catholic, and seeing how acceptable the girl's inference is, he has not the courage, or will not take the trouble, to contradict it. The traces of a tiger being found in the vicinity of the house in the morning, the guests promise to return for the sport so soon as they shall have assured their friends of their safety. Though warned of his folly by David, of whom our hero is already instinctively jealous, Captain Romilly next day insists on riding a spirited Arab, and being spurred to a vain exhibition of his horsemanship at the missionary's cottage, the result is that both the horse and its rider are precipitated down the *khud*, Romilly being stunned by the fall. He is carried into the house, where he is obliged to keep his bed for several days, being waited on meanwhile by the fair and innocent hands of Véronique. When at length able to return to Ootacamund, both find that the intimacy of the last few days has tended not a little to destroy their peace of mind. Romilly again visits the place shortly afterwards, but his attempts to place himself upon a more familiar footing with Véronique are nobly resisted by this brave and prudent girl. Only some few days later when Père Joseph on a visit to Ootacamund discloses the announcement that David had been unsuccessful in an offer he had presumed to make for Véronique's hand, Romilly makes a declaration of his own regard for her, and promises to marry her, if the priest will only consent to keep the matter secret for a time. Dazzled by the prospect which was opening before his niece, Père Joseph in an evil hour consents; and Véronique herself, who truly loves Romilly, does not require much persuasion. The marriage takes place in the little chapel by the priest's cottage, being witnessed only by certain members of the native Christian community. Meanwhile Romilly tries to silence his conscience for this act of deliberate deception, by promising himself that he will make just amends for it, so soon as he shall be able to acknowledge the marriage before the world.

After a brief period of married bliss in the Neilgherry hills, Captain Romilly receives a letter announcing the dangerous illness of his father, and urging him to hasten home with all speed. Promising to return as soon as possible for his bride, he

leaves her in charge of Père Joseph, who already seems to see the coveted fruit within Véronique's grasp. On arriving in England, Romilly finds that he is too late to see his father again, and by the will he is left £30,000 on condition he marries within his own station of life, or otherwise a miserable pittance of two hundred a year. Romilly chafes and fumes at these directions of his dead father, but he has not the courage to avow his secret, and to make the best of his bad fortune. His brothers plot to marry him to Lady Rose Sellon, the sister of his eldest brother's wife, and after some resistance on Romilly's part, their union is brought about. It need scarcely be added that the marriage is not a happy one; Lady Rose continues to flirt as much as before, while Romilly's conscience is incessantly tormented by the undying memory of the past.

Meanwhile the little family in the Neilgherries are passing through a terrible period of anxious suspense. Not a single line is received from Romilly, and, after having exhausted every argument in his favour, Père Joseph's patience at last gives way. While endeavouring to ascertain news of him at Ootacamund, the priest accidentally discovers that Romilly is a Protestant. The truth bursts upon him that the marriage with Véronique was no marriage at all, and that the poor girl has been deserted by her betrayer. Stung with remorse and self-accusation, the old man's heart is broken, and he is brought to a speedy grave. He abstains, however, from imparting his conviction to Véronique, who still believes in Romilly's truth, and imagines rather that some evil must have happened to him. David, it should be remarked, is kept in ignorance of the whole affair throughout the story.

After Père Joseph's death, Véronique determines to go in search of her husband, and, under the plea of wishing to visit her mother's relations in Belgium, she obtains a passage to England as an attendant upon Mrs. Colonel Dowdson. The home in the Neilgherries is now broken up—David, who has promised to keep near and protect Véronique, obtaining the post of steward in the same vessel with her. On arriving in London, Véronique looks out with some anxiety for news of Romilly, who, she at length hears, is on the continent at the very town near which her mother's friends reside. While the poor girl is now eager to join him whom she fondly believes to be her true husband, she is unjustly suspected by Mrs. Dowdson of improper familiarities with the Colonel, in consequence of which she at once throws up her situation and procures a new engagement with a Mrs.

Conway Jones. Mr. C. Jones is one of those gentlemen who are compelled to make periodical visits to the continent for reasons purely personal and pecuniary, and by one of those lucky contingencies, which fortunately are at the disposal of most romancers, he is this time bound for the town where Romilly is staying. After their arrival Véronique on more than one occasion recognizes Romilly without being able to speak to him, but at last she is brought face to face with her husband in the Cathedral of Ste. G  nevi  ve, where he is sight-seeing with Lady Rose and other friends. V  ronique, who overhears some of the conversation and observes that Romilly desires to avoid her, now begins to suspect the truth. Overwhelmed with despair, she still retains presence of mind to enable her to track the party to their house ; and in the evening she lies in wait for Romilly whom she fortunately meets alone. On hearing the truth from his own lips, V  ronique is utterly prostrated, but on his attempting to pity and console her, the natural dignity of her injured womanhood asserts itself, and she repulses him with disgust. She flies to the convent of which her aunt has charge, and in the sanctity of a religious life tries to forgive and forget. A few months after, Romilly receives an envelope which is forwarded to him from the old address, containing the simple words "Je te pardonne."

Two years now pass away. David has been ordained a Jesuit missionary ; V  ronique wears the dress of a Sister of Mercy ; and both are on their way to Macao, as second-class passengers by the overland route. The previous *week's* steamer having broken down, their vessel has to take on its passengers from Aden, and among them is the family of Romilly who has been appointed to an official post at Macao. V  ronique becomes attached to the child Tootoo before she knows whose it is, and on a later occasion when she saves the child's life at the imminent risk of her own, and to her serious injury, her presence on board becomes known to Romilly. Two years' gnawing of that worm that never dieth has had its due effect upon his character, which is now represented as being everything that is penitent and noble. The "Samos" strikes on a hidden coral reef in the China seas, and remains fixed upon it for some days. Romilly heads a party who go off for assistance in one of the boats, but the boat is upset, and the party have some difficulty in getting back to the ship. The vessel being by this time water-logged, the passengers are put into such boats as are available, and sent off to find their way to Hong-Kong. At the

last moment Romilly resigns his place in favour of the Stewardess who is on the point of being left behind, and Véronique, rightly guessing his motives, also quits the boat unperceived. The two thus find themselves together when the "Samos" founders at midnight,—not, however, before mutual explanations and the knowledge that she still possesses her Gor-don's love afford some small solace to Véronique's wounded spirit.

Such is the charming little romance which Mrs. Ross Church has created for us—a creation which, however it may come short of the standard of artistic perfection, cannot fail to excite the interest and sympathy of the reader. The character of Véronique itself is particularly well drawn. Pure and innocent, simple and child-like, as befits one who has been brought up amid the quiet scenes of the Neilgherry forests, and in the household of a pious missionary, her fearless bravery and self-dependence are no less forthcoming when occasion requires it. Many a writer would have hesitated to delineate a mere child, albeit the heroine, in such a character as that in which Véronique is represented at the time of the accident to Alice Ward, in the scene when she and Romilly come suddenly upon a leopard, or when she rescues Tootoo from the danger which threatens him on board the "Samos." Nor is the moral courage of this noble girl less admirable or natural than her physical bravery. Her sensible rejection of Romilly's addresses, her infinite trust in him when once he had plighted his troth—a trust which naught can shake or overthrow until she hears his self-accusation from his own lips—her conduct at that heart-rending moment, and her subsequent endeavour (though in vain) to live down the fond memory of the past, and alike to forgive and forget one who was now lost to her,—these are the true heroic traits of character which constitute the charm of the book before us. The mixture of womanly weakness and strength in Véronique's character, is indeed admirably portrayed, and our admiration is still further increased by our sympathy with her injured innocence. Hers is a sad and pathetic history, but it is not the sadness that oppresses, but that which purifies and exalts both heroine and reader alike. The French language moreover, which she intersperses with imperfect English in her conversation, contributes to give a naive piquancy to her portrait which renders it still more attractive. Véronique is one of the most loveable characters we have met with in fiction for some time, and her memory will not be forgotten by us for many a long day.

It may be expected that we should support these remarks by quotations from the book before us ; but we must request our readers to peruse *Véronique* for themselves, confident as we are that they will not regard the time as mis-spent. As a specimen of our authoress's style, however, we extract the following passage, representing a scene between Romilly and Véronique after the former has recovered from his fall, but before the two are engaged to be married. Romilly wants to give her a ring, which Véronique refuses to accept. Surprised at her reluctance, he suggests that Père Joseph or David has been speaking to her on the subject, and she replies :—

“No one has spoken to me of you, Monsieur ; what I think and feel has all come from myself, from my heart here,” laying her hand upon her breast. “I liked to nurse you, Monsieur Gordon, I liked also to have you for my friend, and you saw that I liked it. But after you were departed, I questioned with myself whether to like you so much was good or safe for me ! and I could not but answer no ! It would be very pleasant, doubtless, whilst it lasted, but soon you will be gone, and I shall have no friend, and then, what is to become of me ? For the same reason, Monsieur Gordon, I will not take your ring, it is like your friendship, too valuable, too fine for my poor life. It does not accord with it, I am better without the ring—or you !”

He felt the truth of her objections to his heart's core, although they did not please him, and he walked beside her silently, with his eyes bent on the ground, as he pulled his long fair moustaches through his fingers, and considered in what words to answer her.

“*N'ai-je pas raison ?*” she whispered presently, but the reply was dubious.

“Yes, I suppose you are right, Véronique, though it's a deucedly unpleasant prospect to contemplate.”

“But it must be wrong to amuse ourselves,” she urged, casting a timid glance at the tall figure beside her, “when so much harm might come from it.”

“And suppose the harm has come already,” said Romilly rashly, “suppose I have a deeper interest in you than that of friendship, Véronique, what then ?”

A flush of glad surprise spread itself over the girl's brow and bosom, and for an instant she had almost yielded to the intoxication of the discovery, and confessed that the feeling was mutual ; but the next moment (recalling the differences in their positions) the hot blood retreated as suddenly as it had come, and left her sick and trembling with bitter disappointment.

“Monsieur, that would be worse than all. You must not even speak of such a thing !”

"Worse than all," repeated the A. D. C. as he put his arm again about her supple waist, "how dreadful a calamity my love must seem to you, Véronique."

He saw the tender light which stole into her soft eyes at the thought, and emboldened by it, bent his lips towards hers. But before he could reach then, Véronique had placed her hand upon her mouth, and disengaged her slight form from his grasp.

"*Non, non ! vous ne devez pas faire cela !* you must not do that," she exclaimed loudly in her excitement, "for what do you take me, Monsieur ? you ask for my love, you ask for my embraces, and you will give me in return—what ?"

"My love, darling," said Captain Romilly, who was growing more eager, the more he was repulsed, "isn't that a fair exchange ?"

"And how will your love end, Monsieur ?" asked the girl, still keeping aloof from her companion.

At this point-blank question, put with fearless eyes, the face of the young man fell, and Véronique perceived it. The flush which excitement had raised upon her cheeks, faded slowly away ; and dropping her disengaged hand listlessly by her side, she hid her face against the dappled neck of "Erin," and burst into tears.' (vol. i, pp. 273-6.)

We are not sure that Mrs. Church has been equally successful in the character of Captain Gordon Romilly, though there is considerable power in the description. Vanity and moral weakness are the two prominent traits which the authoress is anxious to bring into relief in her picture of the gay and handsome young aide-de-camp. Captain Romilly is never represented as radically bad or vicious ; there is nothing to disgust us in his character ; he is fond of flirting, and his flirtations sometimes bring him into trouble, but his errors are simply represented as the result of irresolution and want of moral courage. He is no dissolute libertine, falsely plotting the ruin of beauty and innocence under the guise of a holy marriage. It is easy to believe that he sincerely loved Véronique, and really intended to make her his wife. A more scrupulously thoughtful man would doubtless have reflected on the injury he was doing to the woman he loved by the act of deception which he practised upon her, but with the insight which the authoress gives us into Romilly's character, we can fully realize the difficulties which lay in his path, and which he had not the moral resolution to surmount. In the first place there was the danger lest, if he avowed his true religion before marriage, he might lose Véronique altogether ; and, secondly, his dread of the consequences as affecting his own worldly prospects,

were such a marriage to become known, compelled him to have recourse to a secret ceremony which probably would not have been possible in a Protestant marriage, even had Véronique and her guardian consented to such a union. We can imagine that Romilly would be true to Véronique for some time even after his return to England. A great conflict doubtless sprung up within him as soon as ever he heard the terms of his father's will. He was not legally bound; should he discard the tie which fettered him, and embrace the more agreeable prospect that was opening before him? and the struggle which Mrs. Church represents as being carried on in Romilly's mind between honour and love on the one side, and the fear of poverty and social degradation on the other, has often had its prototype in real life. And Romilly was found wanting. Love and truth gave way. He had not courage to bear his burden like a man, and he tried to shake it from him. But the burden was not to be shaken off so easily. The judgment of Heaven was against him. He had knowingly done wrong, and so he was to suffer. Outwardly prosperous and contented he might be, but within rankled a deep sense of the injury he had done Véronique, and the picture of that injured pale face as it presented itself to him in the street of Brüsssburgh, must have haunted his memory on many a subsequent occasion. His punishment was not inappropriate. He breaks his plighted troth for the sake of a social position in England, and within three years he is forced to abdicate it, and betake himself to that very life of an exile, which he married Lady Rose purposely to avoid. Meanwhile remorse, we are told, fulfils its due office. Romilly's conscience is aroused and his character refined by suffering. Unfortunately—and this is where we think Mrs. Church has failed—this happy result is scarcely brought into sufficient relief. A few lines only record his noble conduct in the boat, while his last act of self-sacrifice on behalf of the stewardess reads more like a trick of the author's whereby to bring him and Véronique together at the last, than the crowning *finale* to a period of penitence and self-devotion. One cannot help fancying that Romilly is as heartily sick of life as he is of Lady Rose, and this is not the temper in which we like to bid good-bye to our hero. Not once throughout the three volumes (if perhaps we except that anxious period when Romilly's better self was contending against the temptations of his position and the schemes of his relations) does the reader feel a spark of real sympathy for him, and for his reason we think that to some extent his portrait is a failure.

Passing on to other members of the *dramatis personæ*, the character of David strikes us as one of the most interesting, the most amiable, and the most Christian that we ever met with in fiction. The only fault we have to find with it is that it is so entirely a fancy-portrait—one that is seldom or never met with elsewhere than in tales and romances. Whether the character is a possible one or not, we shall not now pause to consider. We sincerely trust and believe that equal truth, love, and devotion may be found associated with an Indian origin. God's gifts are fortunately not limited to race or colour; true nobility not seldom lurks within the poorest hovel; and there is no saying what limits are to be placed to the influence of a Christian training. But it must be confessed that such a character as David's is not a common one. As refined as he is honourable, as patient under disappointment as he is pure and earnest in his love, combining a woman's tenderness with a man's strength, resigning all hope of ever possessing Véronique yet guarding her to the last with more than a brother's care and solicitude, David is one of those ideal creations which we delight to contemplate, and the contemplation of which cannot but tend to elevate and refine the soul. Repugnant as such connections must be in the eyes of all Europeans, we could almost wish that Véronique had fallen as a prize to the lot of this brave, loyal and honest lad, rather than that the weak and faithless Romilly should have been permitted to poison the fresh springs of that fair young life.

The minor characters in the book are many of them well drawn. The worst is that they are summarily dismissed so soon as the complications with which they are connected have been unfolded, and we hear no more of them to the end of the story. Captain Romer is a bright, amusing friend of Romilly's whom we should certainly have liked to meet again. But perhaps of all her minor characters that of Mrs. Colonel Dowdson is at once the most amusing and the most natural. How it comes about that English writers—novelists especially—should invariably select the ludicrous side of an Anglo-Indian's character with which to regale the British public, does not concern us here. It is enough that most of us have our ludicrous side, and it is just as well that we should see it now and then with other people's eyes. Who in India has not met Mrs. Dowdson, for instance, with all her grand airs, her false pride, and tyrannical little ways? It would perhaps be too much to say, that every station has its Mrs. Dowdson, but most stations have at any rate a Mrs. Dowdson in embryo, so to say,

whom circumstances may any day develope into the veritable creature Mrs. Church portrays.

'Mrs. Colonel Dowdson, as she loved to style herself, was a very great lady, at least in her own estimation, and there was no one in Madras found bold enough to gainsay her. She had been an ordinary woman, somewhat soured by previous disappointments, and considerably past her *première jeunesse*, when, as her last resource, she had accepted the hand of a "bread and cheese" lieutenant in the 99th Madras Native Infantry, and until the luckless Dowdson had scaled the interminable ladder of lieutenants and captains above him (a slow process when promotion is not to be effected by purchase money), his existence was said to have been anything but an enviable one. Accomplished at last, however, he had the happiness also at the same time to rise considerably in his lady's estimation, for to be a major's wife was not quite so common a lot in her idea; still, there are always two or three majors attached to each regiment, and the ambitious mind of Mrs. Dowdson was not completely satisfied until her husband could write himself down a "pukka" Colonel, and reign in unapproachable glory, after which she felt considerably better, and more in charity with herself and all womankind.

Colonels might be as plentiful as blackberries outside the 99th, but one only at a time could command that corps, and whilst he held that position, Mrs. Colonel Dowdson believed her sway to be as unlimited as that of her husband. She took every salute of the inferior officers as intended for herself, bowed graciously when a guard turned out to present arms to their Colonel, and made a point as each fresh subaltern joined the regiment of giving a dinner-party, in order that she might in proper form present him to his brother officers. In fact Mrs. Dowdson was in her element, prosperity appeared to have no power to affect her condescension, she grew more and more gracious the higher her husband rose in the army, and the lower the military rank of the visitor she entertained, the greater was the amiability with which she patronised him. She was perfectly satisfied with herself, her house, and everything that belonged to her, and she had but one aspiration left, to write herself down "Mrs. General Dowdson" and die.

Mrs. Dowdson had everything nice and good and comfortable about her; yet she had a strange way of so depreciating her possessions as to lead her friends to remark on the superiority of them to their own. She called her large wide house her "humble cot," her tall Arab horses her "pretty ponies," and spoke of the expensively embroidered fabrics which she trailed about the floors after her as "nice light things for summer wear," and women who had been unused to this style of deception, or were not sharp enough to distinguish the "pride which apes" from true humility, really imagined that the Colonel's wife thought what she said, and were proportionately impressed

with an idea of her importance. For if Mrs. Dowdson thought so little of such grand things, what must she *not* have been accustomed to in days gone by? If her carriage horses of sixteen hands high were only "pretty ponies" in her eyes, to what height must not her former pairs have attained? Thus they argued from conclusions, the falsest style of argument that we can follow, and Mrs. Colonel Dowdson, without any cleverness of her own, had sufficient cunning to take advantage of their ignorance.' (vol. ii, pp. 180-2.)

This sketch of Mrs. Dowdson brings us back to the main subject of this article which was not to review Mrs. Ross Church's *Véronique* so much as a work of art as to criticise the light in which she has represented Indian life and manners. Mrs. Church never liked India, and she takes no pains to conceal the fact. We do not blame her for this. Happiness and contentment in India are as much dependent on external circumstances as our likes and dislikes are independent of rational control. To one India is really a *home*; to another it is merely a place of banishment, to be endured only so long as the period of exile shall last. To say that everyone who comes to India ought to like it, would be as absurd as to expect him to change the colour of his skin on arrival. We may make the most sincere and laudable attempts to try to like it, but the lesson may be but imperfectly learnt when the time for our retirement draws near. This was the case apparently with Mrs. Church, and she now has her revenge upon India for the nine years of exile she passed in this country. There is no doubt much truth in her remarks, but they are sometimes exaggerated, and in her pictures of Indian life, she leans a little unduly to the dark side of the canvas. Few now in India, for example, will be inclined to endorse the opinions with which the following extract commences. Either Mrs. Church's remarks are purposely exaggerated with a view to create a false impression, or she can have had but little intercourse with the men who are making India what it is, and upon whom in turn the nobility and grandeur of the task is reflected. The existence of a large European army in India does certainly bring a sensible proportion of idle men to the country, but these are surely not to be taken as samples of the Anglo-Indian community at large. We assert—and we say it advisedly—that there are few countries in the world in which there is more hard work done, and greater interest taken in it, than in India. Mrs. Church must surely have forgotten the long line of illustrious statesmen and warriors, who have been reared in this country to be the pride and glory of the English name.

'India is the nursery of bigotry, prejudice, and small-mindedness; its enforced existence of enervating and soul-debasing indolence often kills all that promised to be noblest and best in a man's character, whilst it seldom has the power to draw out his finer qualities and make them sterling. She is truly the Juggernaut of English domestic life—year after year we lay beneath her wheels the flower of our British manhood, who, if they survive the process, deliver up in their turn, sweet home affections, the prattling of their children, often the best part of their wives, (for what true mother smiles as she could smile, when leagues of ocean roll between her and her little ones?) generally, the best part of themselves. And then, when they have had youth and all that makes youth beautiful—that can make old age serene—crushed out of them; when they have learned to look at life only through Indian spectacles, and to cavil at everything that is not done exactly after the same pattern as they do it in the East, they return to their native shores; to meet their children as grown up men and women, and to wander about in a listless manner like fish out of water, for the rest of their days, grumbling at what they cannot alter, and regretting what they cannot regain.

Were there no other reason to render life in India an evil, the separation from one's children would cause it to be so. It was not for nought that the Almighty made the care of little children troublesome and parents patient under it; and though men and women who know nothing of such small trials, profess to laugh at those who do, their laughter comes from ignorance of the blessings hid beneath such care. The trouble and the patience re-act upon each other, and it is of their co-operation that is born that marvellous and unalienable love existing between parents and their children. The father and mother who miss all this, who confide their infant charge to other hands, lose (it shall not be said a great pleasure since that is a matter of opinion) but a soul-fortifying influence for themselves. The watching, the inconvenience, the self-denial, all bear blessed fruits which no after kindness can, in like force, produce; and the man and woman, whose faces are the first things their children can remember to have known, whose hands have guided their baby footsteps, and at whose knees they have been taught their first prayer, have laid up for themselves a treasure which the world can neither give nor take away. Yet this is what nine out of ten resign when they accept a life in India, and for which ninety-nine out of a hundred, did they speak the truth, would confess that no wealth or lack of trouble can repay them.' (vol. iii, pp. 10-3.)

These remarks contain a great deal of rubbish, and appear to us to be written in a very objectionable tone. An unprejudiced reader might suppose that Anglo-Indians pretend to find a source of satisfaction in enforced separation from their children,

On the contrary, we are inclined to think that they *do* speak the truth, and sincerely bewail what must ever be the greatest drawback to a residence of Europeans in India. Indeed this is a subject in regard to which we might fairly expect to meet with the sympathy of our countrymen and countrywomen, instead of insinuation and ridicule.

Mrs. Church on several occasions grows warm upon this topic, and her language is sometimes forcible. Speaking of the Dowdsons, she says:—

‘Having given up the country *for which God had intended them*, and adopted one in which they were not fitted to live always, they found themselves in middle age childless, lonely, and strangers in the land which was by inheritance their own.’ (vol. iii, p. 9.)

Mrs. Church is evidently not a believer in the hand of Providence guiding Englishmen to India.

Not content, however, with abusing India herself, our authoress apparently cannot bear to hear others say a good word in its favour. Major Taylor is a character introduced at a dinner party in England, and he is thus described:—

‘Major Taylor was a man who could not talk over a subject which annoyed him quietly, and the dislike evinced by most Englishmen to Her Majesty’s possessions in the east was his greatest sore. The country which fed them, the country which clothed them, the country which paid them, he could not find enough to say against those miscreants who eat of her bread and her salt, and yet said she was the most detestable country in the world. The Major fumed and spluttered over his favourite topic, and forgot to eat and drink in his anxiety to prove that India was quite as desirable a residence as England and for some reasons more so.’ (vol. ii, p. 108.)

The following passage is characteristic of our authoress. We may imagine Mrs. Church speaking through Gordon Romilly. His friend Romer thus addresses him:—

“I have received a great deal of hospitality and kindness from my countrymen in India; so that I do not like to hear you pass so sweeping a condemnation on them.”

“I speak of a man as I find him,” said Romilly carelessly, “and perhaps I have not happened to come across your friends. The people I have been introduced to, have been well enough as long as I praised Indian manners and customs; but once compare them unfavourably with those of England, and they were up in arms immediately.”

“Well, it is natural, is it not? This is their adopted country; they are right to stand up for her.”

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and entertainments and ceremonies as though they were the grandest the world had ever produced. Why, would you believe that one woman had the assurance to tell me at a Government House dinner that she supposed I had never seen so large a party assembled before ? ”

Captain Romilly put this last question so seriously, that he infinitely amused his friend.

“ I can quite believe it, Romilly, and also that the lady was perfectly sincere in making the assertion.”

“ Well then, she must have been a fool,” rejoined the other, not over politely, “ or could know nothing of the way in which we live in England.”

“ There you’ve hit it, Romilly ! For the most part they do know nothing of what we call ‘ society ’ at home. They come out to India fresh from their boarding-schools ; and if they visit it at intervals, it is generally in the capacity of parents with large families, and when they are under the necessity of economising by hiding their heads in furnished apartments, or burying themselves somewhere in the depths of the country. You can’t expect them to have any knowledge of the method of living amongst the higher classes of England, for they have never seen it ! ”

“ Then why do they brag so ? They talk of their dances and their dresses and their suppers, as though they were the best in the world ; and yet I have never been to a ball in India which could compare with a respectable one at home ! ”

“ Because they are the best in the world to them,” replied Romer, “ Madras is their London, and Government House their Buckingham Palace. We brag of ours, don’t we ? ”

“ Well ! it’s aggravating to say, the least of it,” returned Captain Romilly. “ They talk so big whilst they’re in India, and when they go home, suddenly collapse and are nobody.”

“ To which lamentable conclusion your displeasure may safely leave them, with every prospect of being amply revenged,” said his friend. “ I think there is no more pitiable sight than the spectacle of some old Colonel’s or General’s better half who has been lording it for years over the inferior officers and their wives in India ; landed in England, still bristling with the pride of importance, to find herself in twelve hours just nowhere at all ! No wonder the generality of them hate a country, where, if a woman has nothing in herself to recommend her, we have no time to take her husband’s length of service into consideration ; and when Generals’ wives and Subalterns’ wives find alike that without a certain income it is impossible to keep pace with the herd. In England everyone finds his level : that soon takes their bragging out of them, poor things ! And so, Romilly, I think we needn’t grudge it to them whilst they are here.” (vol. i, pp. 21-4.)

This, then, is the first serious charge which Mrs. Church brings against us, *viz.*, that we think more highly of ourselves

in India than we ought to think. Whether true or not, it is not a new accusation by any means, and we are of opinion that Mrs. Church's arguments add no great weight to the evidence on which it rests. That Anglo-Indians, after a life-time spent in this country, sink to be nobodies when they go home, by no means proves that they thought too much of themselves, or were estimated at too high a value out here. In India they are known; in England they are unknown, and possibly not appreciated at their true value. Nay, such writers as Mrs. Church by remarks like those above, are doing their best to depreciate them, and to make them known only for the foibles and eccentricities of their character. There is one consolation however. Mrs. Church's remarks would seem to be confined to Madras; in that Presidency they appear to have reference solely to the military services; and in military society they are restricted to the softer sex.

Mrs. Church thinks it a crime that Anglo-Indians know nothing of "what we call 'society' in England." As we said above, she appears to be speaking of the ladies; but, ladies or gentlemen, if by 'society' she means *London* society, she is probably quite correct. It is not the upper ten thousand of London who furnish recruits for the government of India; they come from the middle classes of the people of Great Britain, mainly perhaps from Scotland. And, though Calcutta or Madras society does not and cannot compete with the tip-top society in the largest metropolis in the world, we fearlessly assert that, as compared with the middle-classes of England, the Anglo-Indian community as a body is the more refined, better educated, and more liberal-minded. Dr. Norman Macleod, who is probably as good an authority as Mrs. Ross Church, found English society in India to be "much the same as English society at home, although," he adds, "English society of the best kind." Such is the difference of opinion formed by our critics! Possibly their ideals of good society may differ, and if the English society to which Mrs. Ross Church introduces us in *Véronique*, is a specimen of her ideal, we really think Anglo-Indians have abundant reason to congratulate themselves upon their ignorance of it.

It is scarcely to be wondered that people who have spent the best years of their life in India, and have accustomed themselves to the manner of living which is found congenial to their health and comfort in the East, should, on their return to England, regret many of those luxuries which are no longer necessary or

available in a temperate zone. To take a very homely example, how difficult it frequently is in England to procure that daily bath which in this country is so indispensable a part of our existence. Carriages and horses, which are a necessity in this climate, are not equally necessary at home, and are infinitely more expensive. But after being used to them for a life-time, it is not surprising if it costs the Anglo-Indian a pang to have to dispense with these important appendages to dignity and comfort. The fact is, we live more luxuriously in India than we can most of us ever afford to live in England ; we look back with fond regret at many of the institutions we are compelled to renounce on returning to England, and our regrets are not always veiled in prudent silence. English people do not like to hear their friends speak of luxuries which they themselves have never enjoyed, and the result is, the condemnation of Anglo-Indians as a set of discontented and luxurious grumblers.

The second charge which Mrs. Church brings against us is that of *snobbishness*.

“A conceited puppy !” growled General Perkins, but the opinion no longer met with unqualified assent. Captain Gordon Romilly was conceited no doubt, and a puppy into the bargain, but he was the son of a Lord, and grandson to an Earl, and Honourables are too scarce in India to be sniffed at with impunity.’ (vol. i, p. 17.)

Dr. Macleod says, if Indian society has a weakness, it is a tendency to degenerate into pomposity, which is only one of the Protean shapes which snobbishness assumes. And it must be admitted that the charge is not altogether groundless. We think it may be partly traced to the undue preponderance of the official element in Indian society, whereby undoubtedly a large amount of independent thought and action is suffocated. The system of patronage in force in this country leaves scope for almost unlimited *toadyism*, in which, perhaps, we have unconsciously learnt a few hints from our Oriental friends. And the intimate terms upon which all grades of the community are brought together, tend to encourage a spirit of rivalry and emulation, which only ends in extravagance, heart-burnings, and pomposity. Everyone must be as grand or grander than his neighbour. If Brown gives his friends champagne to dinner, Jones must do so too, though he cannot afford it. And so in everything else ; we take the cue from those above us, and try to imitate them in all their actions. We flatter and cringe when it suits our purpose, and we are flattered ourselves in turn, when it suits the purpose

of others. All this tends to encourage pomposity, hollowness, and snobbishness.

A third charge with which we are assailed is, that of being a scandal-loving people. And in this charge too, there is much truth, though the accusation scarcely perhaps comes with fitness from the authoress of "*Gup*."

The scenes at the Ootacamund Post Office and at Mrs. Dowdson's levée, which are pictured in *Véronique*, if slightly exaggerated, are nevertheless in their main features true to life. It cannot be denied that much vain and idle conversation does take place in India, and for the matter of that, in many other countries besides. Like the Athenians of old, many of us spend our time in nothing else but either to hear or to tell some new thing; and the result is a large amount of gossip, which is not always as innocent as it ought to be. Mrs. Church attributes this state of things to the monotony and idleness of an Indian life, and there is doubtless considerable force in the remark. But over and above the facilities which idleness affords, the greater sociability of society in India is in itself sufficient to account for much silly and ill-natured gossip. When a woman (for Mrs. Church's remarks apply chiefly to the tender sex) meets the same people day after day, and is compelled to make herself agreeable and discover new topics of conversation, what wonder if that conversation sometimes takes a personal turn, and if the words and actions of her neighbours are canvassed more narrowly than they ought to be. And this is probably the reason why we find so much more scandal—meaning by the term idle and ill-natured talk merely—in the mofussil and hill stations than at the Presidency towns. Mrs. Church herself admits that the scandal is confined to talk; she flatly denies that the lives of English women generally are a whit less pure in India than elsewhere; she asserts that the charge of extra levity, which has been brought against them, is unfounded. "Women, in India," she writes in *Gup*, "are often quoted as being more careless and reckless than their sisters in England. I am not sure that the apparent truth of this assertion is not a little owing to the fact that scarcely anything can be done or said in India without its being known." (p. 9) In another place she attributes it to the fact that there are, comparatively speaking, so few ladies in India, "and those few have so much leisure that liaisons and flirtations, that we should at home have no time to talk about, are considered sufficient to form matter of discussion for a whole cantonment abroad." (p. 38.)

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Before concluding our remarks upon *Véronique*, we cannot refrain from noticing an unjust and false insinuation which Mrs. Ross Church aims at the Indian press. It was not unnatural that *Gup* should meet with much severe, if not hostile, criticism, at Madras and other places; and, like some other writers who have not been appreciated at their own estimate, she attempts to sneer down her critics. The bitterness of the authoress's mortification may be gathered from the following extract:—

“My dear Romilly, don't you know that most of these fellows who have any thing to do with the local Indian papers are half-castes,” said Captain Romer, “and of course they don't like the dormant state of the faculties of their nearest relations alluded to in that cool manner. How would you like the dormant state of the faculties of your mamma or papa shown up in public print?” * * *

“But excuse me if I say,” observed Captain Romilly, “that it seems incredible to me how you could mind attacks from such quarters any more than you would heed the snapping of a mongrel cur. Why, I should have thought that a glance at one of their local papers was sufficient to decide the worth of their criticisms. Printed on tea-paper, with every other word spelled wrong, and the rules of grammar ‘nowhere’; how is it possible that their reviews can affect the success of any book? Even were they universally read and believed, they can only bias the opinion of residents in India, and what are they, compared to the mass of minds to be swayed in England? A drop of water to the ocean!” (vol. i, p. 57-8.)

To assert that the greater number of those connected with the local Indian press are half-castes is just about as true as to insinuate that respectable people in India go about in the hot weather without stockings (vide *Gup*, p. 40), or that all missionaries are like the specimen whom Mrs. Church met at Bangalore. This hasty generalization from individual instances is one of the greatest blots in Mrs. Church's writings. The Indian press has its failings doubtless, but to draw such mighty inferences from a few typographical blunders proves that the author has little experience of the material with which the Indian press has to work—compositors who possibly do not understand one single word of the type which they set up; while as regards grammar, it is not from Mrs. Church that Indian writers need to take a lesson. The fact is that the press in this country, as in England, is supported by some of the ablest pens in both services, and their criticisms are often worth greater consideration even in England than they usually receive. It has been remarked before now that a personality is worth a dozen well-written articles

to an Indian paper, and there was a time probably when the remark was true, as on the other hand we have seen our best journals cringing to the authorities with an amount of subserviency which is equally disgusting. These extremes are the Scylla and Charybdis of Indian journalism, and we are glad to say they are studiously avoided in the present day by the best among the Anglo-Indian papers. For the most part an independent and gentlemanly tone now pervades the Indian press, which cannot fail to add to its weight and influence.

But it is time that we passed on to notice the second book on our list. We regret to say that its merits are not such as to detain us long in the recital.

Nirgis and *Bismillah* are the names of two dusky heroines who fall in love with Englishmen, and the history of their loves forms the ground-work of these tales. The treatment of such a subject, it will be admitted, is beset by peculiar difficulties. Let us take each story separately, and see how far the author has been successful.

Nirgis is what we in India vulgarly call a nautch-girl ; that is, in Hafiz-Allard's more polite language, a "singer" or a "dancing girl." Her story is soon told. One day when on her way to exercise her profession before a certain Nawab, she suddenly meets with two Englishmen pig-sticking. One is De Monte, the Collector of Rampoor, a district which is not on the map, but which admitted of its Collector having a residence in Delhi. The other is his friend, Captain L'Adone, of the—Carabineers, "the eldest son of a rich English family". L'Adone is thrown from his horse and falls insensible. The girl runs from her *ruth* and brings water to recover him ; and on opening his eyes and seeing her, L'Adone throws a gold chain round her neck, such things being usually carried about for the purpose by Englishmen when out pig-sticking. The short interview, however, *plus* the gold chain, we may presume, is quite sufficient to disturb *Nirgis*'s peace of mind. She becomes "silent, melancholy, and out of spirits," and so a pilgrimage to Delhi must be undertaken. On arrival, *Nirgis* spends her time, when not dancing, in "collecting statistics" about the city and its neighbourhood, until the mutiny breaks out, by which time the beautiful nautch-girl has managed to establish herself as an inmate of the palace. When the rebels surprise Delhi, De Monte is in the city, and *Nirgis* rushes off to save his life. This she effects by throwing dust into the eyes of Afzul Khan,—a *budmash* and an admirer of the pretty singer—just

as his hand is raised to strike De Monte. L'Adone joins the English camp before the city, and Nirgis supplies him with news from the palace. On a later occasion she is chosen to be the confidential bearer of secret terms from the old king to the English. She finds her way to L'Adone's quarters, transacts the king's business, and tries to do a little for herself at the same time. Though this is only the second time she has set eyes on her beloved, she is not too bashful to make a proposal of marriage, which she does in the following novel way. "She took off a ring, put it into the Captain's hand, and holding out 'the mystic finger, said 'Padre!'" L'Adone, however, does not see the matter in that light at all, but contents himself with giving her a kiss and asking her to measure the height of the walls for him. It is needless to say that Nirgis retires disconsolate and disappointed. She attempts to take the required measurements, but is detected in the act by her old lover, Afzul Khan, who, to revenge himself for her indifference to him, has her thrown into prison. There he again tries to win her over, but she again rejects him. On the capture of Delhi, Nirgis is released, but L'Adone is shot down at the palace gate. The singer finds his body, and De Monte who is in attendance and "knew all," takes a ring from the hand of the deceased, and places it on that of the singer. "Nirgis said not a word, she shed not a tear; but the chill of autumn had withered her heart," and she sets out for a pilgrimage to Mecca.

Such is the story, but the book is what a Yankee would call "an almighty collection of notions." Hafiz Allard is G. P. R. James, John Murray and Martin Tupper—"three gentlemen all in one." *Nirgis* is not only a striking romance, but it contains sufficient facts and statistics about Delhi to fill a hand-book, and platitudes moral and trite enough to satisfy even the soul of the great poet we have mentioned. We strongly recommend *Nirgis* to the careful attention of the compilers of *Newman's Tourist's Guide*, and the *Gazetteer of the Panjab*. The author's mind, in fact, appears to be a mighty farrago of undigested matter, and not the least curious among his idiosyncrasies is the mode which he has selected, whereby to relieve himself of the burden of ideas with which he is labouring. To construct a romance upon a historical basis is a well recognised method of illustrating history, and in the hands of such men as Walter Scott, Bulwer Lytton and Kingsley, history is not thereby travestied into burlesque. But to write a romance in order to compile a guide-book is a new idea

altogether—only to be surpassed by the still more daring artifice of putting the whole into the note-book of a nautch-girl!

But let us scan the pretty singer a little closer.

‘Nirgis was about fifteen years old; you at once saw from the contour of her face that she possessed a good deal of natural ability; those who knew her well were also aware that she was of a good disposition. She seemed to move about and live in the worst society without contracting its taint—like finely polished marble, which sparkles bright from year to year. Although uneducated, it was clear that some fixed principles of good influenced her, and the rude classes with whom she was brought in daily contact felt her power.’ (p. 9)

For twenty closely printed pages, Nirgis listens to the driest facts about Delhi and its vicinity. No wonder the poor girl

‘Felt that she was likely soon to forget what she was learning; she therefore now and then made a few notes with a pencil which she carried with her. Many Mahomedan girls learn to read, but few Hindoos; when a Hindoo girl becomes a widow, then she commences her studies! Rajpoot girls are an exception to this rule.’ (p. 38)

This by the way; but there is a good deal “by the way” in *Nirgis* and *Bismillah*!

‘Nirgis had been promised a trip through the imperial city, with a sketch of a few of those buildings which were celebrated, together with some statistics which she was anxious to collect. But the month of May requires that sight-seeing should be done in the morning, since, as mid-day approaches, the streets of Delhi are hot, close, and by no means attractive.

Now, Delhi is a city to be approached with some amount of historical knowledge, and this Nirgis in a measure possessed. Her teaching had not been very profound; still, for a country dancing-girl, she knew a good deal. She had noted down, as she collected the facts, that Delhi had ceased to be imperial on eight different occasions, and that the seat of Government had once been removed to Dowlutabad. It had been ascertained that Inderpat was the old name for Delhi, &c. * * Nirgis often wondered what was the origin of the name Delhi, &c. * * Old Delhi, Nirgis found, was founded by Rajah Aurangpal in 676 A. D., &c. * * Whilst attending court, Nirgis had been instructed that the fort of Selimghar, which abuts into the river Jumna, &c. * Nirgis now ventured to ask about the canal which ran through the Fyz Bazar, &c.’ (pp. 53-59)

Heaven save the mark! where is all this to stop? And what more can Miss Carpenter have to say, when a common

country dancing-girl is found going round Delhi with a note-book and pencil, collecting statistics ! But of course there is a purpose in all this, so far as the story is concerned, and it is thus referred to.

'She little knew the use the information she was collecting about Delhi would be to the British Government, that to her note-book the success of one of the most celebrated sieges in history would be mainly owed.' (p. 95)

There is a mystery in this passage which we are unable to penetrate, and unfortunately it is nowhere explained in the sequel of the story.

But enough. Let us pass on to Bismillah, who is no common dancing statist, but "a princess of the royal house of Timour." Her recorded history is a very brief and (we must add) a very stupid one. She pays a visit to Cashmere, and of course 80 pages out of 230 are occupied with a description of, and sundry "statistics" regarding, the route. Just half-way through the tale she meets the hero, Captain De Laré, a military civilian on leave, in whom Bismillah recognises her cousin—De Laré's grandmother having also been a "Pearl" of the Timour family. Bismillah introduces herself to De Laré, and requests him to visit her, which he does several times—occasions which Bismillah improves by teaching him to speak Hindustani. Her exertions to captivate the handsome young Captain are at length crowned with success, as they deserve to be. De Laré becomes the Earl of Blushington with forty thousand a year, marries Bismillah, and apparently deserts her immediately afterwards, but that again is shrouded in mystery.

Such is the frail thread of romance which runs through *Bismillah* and on which is strung such a mass of twaddle, venom and bad taste, as to make us regret even the two hours which sufficed to look through the book. *Bismillah* has obviously been written with two objects in view. The author wishes the public to know that he has been in Cashmere, and the opportunity is taken to have his revenge for some imaginary grievance under which he labours. The grievance is hinted in *Nirgis* (p. 17), where De Monte is chaffed by his friend for having "trusted the good faith of an Indian Secretary,"—L'Adone having "formed a poor opinion of many of the civilians of India,—having detected, he thought, a mean tolerance of official duplicity and anxiety to obtain promotion at a perfect sacrifice of self-dignity." In *Bismillah* we are let further into the secret. Hafiz Allard, it seems, is a retired civilian of the

old school. At p. 194 he thus writes of the Civil Service "yielding to the crushing blight of envy."

'We shall soon run our course ; we feel the sands of our hour-glass running out apace ; but we shall live in the estimation of future ages. If we pass away, we dissolve in good company—we shall not long survive our gallant brothers in arms, the officers of the Indian army. When the good old master is no more, the servants soon follow.'

What Hafiz Allard's particular grievance is, we are unable to say ; and though it might be possible to unravel the mystery, we must confess that we are not sufficiently interested in the author to be induced to attempt the task. Possibly, he thinks that he ought to have been made Commissioner of Peshawar, when Mrs. Popkins so cleverly secured the appointment for her husband in the manner which the inquisitive reader will find duly chronicled at p. 223. Anyhow the writer would appear to entertain an invincible repugnance to the new race of civilians who owe their place to the system of competition. Hafiz Allard rakes up again the two hackneyed charges which Messrs. Gubbins and Vansittart once brought against them, but which we thought they had long ago lived down. And not content with maligning the men, the writer, with a vulgarity and bad taste which even want of brains will not excuse, must needs attack their wives (God bless them !), having apparently an ill-natured grudge against some fair creature with red hair, which would seem to be Hafiz Allard's particular abhorrence. We have no doubt, however that both the competitioners and their wives will survive the rather rough handling which they receive from the author, and the only results of *Nirgis* and *Bismillah*, as far as we can see, will be to add another grievance to the long list from which the author appears to be suffering. Hafiz Allard will probably find that India is not the only country in which his merits are not estimated at the figure he himself puts upon them. We only trust that Messrs W. H. Allen and Co. will not also be losers by his publication.

CRITICAL NOTICES.

A Selection from the writings of Viscount Strangford on Political, Geographical, and Social Subjects. Edited by the Viscountess Strangford. In two volumes. London. Bentley, 1869.

FEW who were in England during 1866-8, or endeavoured to keep up with the current of contemporary political writing, can have failed to observe the ability with which subjects relating to Turkey, Crete, and Central Asia were treated in the *Pall Mall Gazette* throughout those years. For ourselves, not being *au courant* with the stream of literary gossip (which *pays* better than mines of solid research), we cut out article after article, with increasing wonder who the writer could be who combined so much accurate knowledge with a peculiar playful ferocity of style, which made us earnestly trust never to fall into his clutches. The tone was something like that of a certain famous series of articles in the *Saturday Review*, wherein Professor Kingsley and other sciolists are demolished week after week by an author who knows his subject thoroughly, and knows that he knows it; but Mr. Freeman is too much occupied with his English and other people's 'Anglo-Saxons' and 'Semi-Saxons', not to speak of Dietrich, and Charlemagne Emperor of the French, to have a thought to bestow on Bulgarians and Usbegs and Toorks; and, besides, there is no denying that Mr. Freeman is arrogant and positive, while this writer dwelt on his own ignorance as much as on other people's. At last, the riddle (no riddle, perhaps, except to the outer world) was painfully solved by the *Pall Mall Gazette* in its obituary notice of Lord Strangford. This, then, was the writer—a peer of England, and President of the Royal Asiatic Society—who had instructed and amused us so long, and whose contributions to literature were to cease before he had done more than made his mark, and impressed reading men with the sense of what he might do, were he once to throw himself vigorously, and with a view to permanency, upon any one of the numerous subjects which he had specially made his own. For the papers which form the bulk of these two conveniently printed volumes, and among which we recognise

nearly all our old friends, were written from day to day to supply the day's needs, and of course contain much which the author would himself have regarded as unfit for permanent record. That they have been so recorded is a matter for congratulation, for Lord Strangford was one of those few men (the salt of the earth) whose daily conversation was more instructive than the laboured workmanship of others: and these papers very much resemble table-talk. We see with pleasure that Lady Strangford intends to continue the series by publishing her husband's notes on philological subjects, the value of which will continue unabated even when the successive phases of the phantasmagoric "Eastern Question" have made of this book a mere record of a single aspect of the past. For Lord Strangford was a ripe philologist of especial authority in a branch of the subject not much cultivated among Englishmen—the Turkish and cognate languages; he could converse with an Usbeg in his own dialect; and his especial *forte* was the scientific study of language. If any one is surprised to find a peer of the realm so hard and successful a worker in pursuits not immediately political, his wonder may be dissipated when he learns that Lord Strangford was not brought up in the purple; a younger son, and without any provision, he had to work for his bread like any of ourselves, and spent twelve years in Turkey, in the capacity, first, of a student-*attaché*, and afterwards, if we are not mistaken, of Secretary of Legation, at which post the Crimean war found him.

The book before us contains only two papers not written for a daily journal; namely, the paper entitled 'Chaos,' which was prefixed or postfixed (we forget which) to his wife's interesting book of travels, *The Eastern Shores of the Adriatic*, and an article on *Vambéry's Travels* from the *Quarterly* of 1865. The rest of the book is composed of *Pall Mall* papers, with a few extracts from private letters, arranged in the order of their subjects,—Turkey, Greece, Crete, Central Asia, and Russia, concluding with some miscellaneous essays. The characteristic of them all is knowledge. The writer often plays with his subject, like Mr. Freeman and Mr. Matthew Arnold and a few other men of conscious power, and he spends more time than is perhaps agreeable in exposing the ignorance of others, but while we think we are laughing, we are always learning, and as sophistry after sophistry is shown up, we find rather to our astonishment, that the process has left a solid

residuum of what Mr. Sawin calls "correct ideas." To give a notion of the author's thorough sense of fun, we will not quote (for the *Saturday* has recently quoted it) the delicious account of the "two huge male geographers," Sir Henry and Sir Samuel, coming into contact on the subject of the annexation of Abyssinia, but will rather choose a topic more appreciable to our readers, who may recollect what ineffable nonsense the *Times* talked about Tibet, when the story of the nameless pundit whom Captain Montgomerie had sent out reached England. Every newspaper has, we suppose, a special circle whom it is particularly anxious to please, and the *Times*, despising scholars, writes down to the level of the warm city merchant whose only interest in Tibet is created by the fear of additional income-tax.

"It pooh-poohs or loftily patronizes alike Tibet and Captain Montgomerie and the pundit without a name, and the Anglo-Indians who want to know what lies beyond the Himalayas, and the natives who furnish pundits weak enough to lend themselves to the acquisition of the arts of surveying and what Mr. Squeers would call trigonometrics,—in fact everybody that can possibly be associated with Tibet, and the poor pundit's journey therein, catches it finely. What was the use of the journey, it wants to know, when we knew all about Tibet before 'in a general way'? And then it tells us in a general way what it, speaking for other people, happened thus to know; and very curious the knowledge is. The Tibetans are subjects 'after a fashion' of the Chinese Empire; they obey the Grand Llama (*sic*); they grow tea; even their country has been surveyed. Why the Grand Lama should be spelt with two *l*'s it is impossible to say. He might as well be called the Grand Alpaca. Can it be the associations of shawl-wool as an article of Himalayan produce? What on earth has a large, hornless, and much salivating Peruvian animal, the liquid or *mouillé* initial of whose native name the Spaniards have transmitted to us according to the orthographical expedients of their alphabet, to do with the central object of Buddhist outward adoration—that which 'shows the way,' as the true name denotes? About the tea growing in Tibet we are content to put it to every school-boy, as well as to any grocer, to say whether it does or does not grow there. We charitably hope that the writer had some impression of Tibet being a highly tea-drinking country floating about in his mind. . . . But tea grown at an average level of 14,000 feet above the sea! Tea for the use of the Alpine Club grown on

"the Grands Mulets after that ; tea (green of course) in Greenland ; tea in Iceland, where, to be sure, you have, by a providential arrangement of nature, both tea-kettle and plenty of boiling water as well, the same plainly showing that Iceland is destined to be a tea-growing country in ages to come ; Wal-russian tea from America ; cheap Labrador tea for the working man. But no more of this ; our readers have doubtless had enough of it, and would like us to ring and have the tea-things of absurdity cleared away and taken downstairs into the pantry of oblivion."

But it is not fair to take one of Lord Strangford's lightest passages as a specimen of his book. However playful his style, the lessons he conveys are throughout of the greatest value to the politician. While in Turkey he depreciates ignorant sentimentalism, the assumption of nationalities where none exist, and the readiness of Englishmen to lend their ears to any cry of oppression fostered by Russia for her purposes, he is in Central Asia far from an alarmist, and at the same time explicit in his warnings to us to be on our guard. He believes, and with reason, that Russia's aggressions in Central Asia are not intended as so many deliberate menaces to us more than our own annexation of the Panjab was intended as a deliberate menace to Russia, and that possibly Russia would have taken the same course had there been no India beyond. The Russians put forward the command of Central Asian trade as their leading motive, and our author suggests that, strange as it may seem, there may be some truth in what they say, if it were only possible for the English, and especially the Anglo-Indian, mind to conceive such a thing as territorial aggrandizement undertaken for commercial purposes. But it is so clear that our own East India Company aimed only at getting nearer St. Petersburg ! and no one even in Manchester really cares for grey shirtings and fair Dhollera—that is all a pretext intended to blind the Russian public ! Then, as to the rectification of frontiers insisted on by the Gortschakoff circular of 1864, can no one believe that the political view of Russia at that time was simply, as therein stated, to get a wall of distinct states with some sort of government on its boundaries, instead of a mere congeries of nomad and predatory tribes ? We should ourselves be more comfortable, flanked by a compact Affghanistan, than by Swat and Bunnu and Hazara, and a score of wild nationalities of no man's land, giving us infinite trouble, with no responsible head to settle it with. We stop short, and wisely, at boundaries

fixed by nature, but to Russian Turkestan there are none such at present ; and the policy of advance is as natural to them as it would be to us under the circumstances. The Russians are only following the track of events : chance opportunity and irrepressible individual action determine their advance, and no deep-laid policy of getting nearer India. But still they *are* coming nearer, and the effect of their approach upon our own subjects and feudatories is worth all the consideration it will ever get. Lord Strangford deals wisely with one aspect of the matter when he says:—"The occasional outbreaks of overbearing offensiveness
 " or contumely towards natives, the slight estimation of their ideals
 " and their literature, which are the only blot on our occupation of
 " India, and one for which our Government is not in the least to
 " blame, are evils which must be mitigated, and our sympathy
 " with natives will have to be increased, in front of a power whose
 " whole command over Asiatics is said to lie in her placing them on
 " a footing of social equality with her own central race, and her
 " absence of all caste feeling. Too much has been said, it may be, on
 " the Continent, about her capacity for sympathy and absorption,
 " her 'assimilationsfähigkeit,' as those wonderful Germans call
 " it : too little has been said here, we are sure. It may be well to
 " reflect that the words 'niggerclassic' applied to Firdausi and
 " Hafiz, are not as yet to be found in the Russian dictionaries ;
 " and that the two great vernacular languages of extra-Arabian
 " Asia, neglected here, are taught in Russia with admirable vigour
 " and success." And we may conclude with some wise practical suggestions for allaying apprehension and increasing knowledge, which are to be found on pp. 228-230 of the second volume.

"The best heads of elementary instruction for the purpose
 " of rectifying, harmonizing, and concentrating our own and
 " the Indian public opinion on the various branches of the
 " Central Asiatic question, we take to be briefly as follows :—
 " *Firstly*, the keeping each question or thesis of discussion
 " separate from the others, unless purposely comprehended with
 " them, which last the writer will only do at his own risk ; thus,
 " not treating a writer who advocates the absorption of Cashmere
 " into the Indian Empire, or the exercise of control over its ruler
 " by forbidding unlicensed diplomatic intercourse on his part
 " with Russia or Yarkand, as necessarily a Russophobe preaching
 " an aggressive movement in the North-West ; each topic to be
 " kept separate, and cleared as much as possible from general-
 " ities. *Secondly*, the immediate construction by geographers
 " of a *raised map* of Afghanistan, showing roughly—for our

“ present knowledge does not admit of its being done otherwise
 “ than roughly—that Kabul, the conventional capital of that
 “ loose-knit country, does not lie on, but off, the trunk road of
 “ invasion of India from the north-west, and that its occupation,
 “ together with that of the neighbouring country, would not
 “ necessarily follow as a consequence of a future forward move-
 “ ment upon Kandahar, or even Herat, should that ever be
 “ deemed expedient: the general term of Affghanistan being
 “ made usually to comprehend two lines of country, physically
 “ distinct, and presenting far different degrees of difficulty in
 “ every respect. *Thirdly*, a clear historical statement of the
 “ periods at which Russia really endeavoured either to embar-
 “ rass English rule in India, or actually entertained the project
 “ of invading India; pointing out the then altogether fatuous
 “ and chimerical nature of that project, the extreme rarity of
 “ its conception, and the entire absence of trustworthy
 “ information at each time in its possession. This should be con-
 “ trasted with her permanent and present desires, as revealed
 “ throughout her history, of consolidating a Christian empire
 “ founded on the ruins of Mussulman Tartar rule, and of securing
 “ ultimately the full commercial command or monopoly of
 “ Central Asiatic markets. *Fourthly*, a complete exposure of
 “ the chaotic state in which the very best maps—ours and theirs
 “ alike, except Colonel Walker’s last—represent the country
 “ between the Upper Oxus and the Indus; the Russian map of
 “ Veniukoff, reproduced in the last volume of our Geographical
 “ Society, being taken as the base of such exposure.....*Fifthly*,
 “ and chiefly, the instant reproduction of all Rawlinson’s articles.”

Death the Enemy, and other Poems. By William H. Wright,
 B.A., late scholar of Corpus Christi College, Cambridge;
 Professor of English Literature, Government College, Benares:
 1869.

THE motto upon the title-page of this little contribution to Anglo-Indian poetry is not inapt. “Et spero et timeo” expresses at once the ambition that aspires to the rank of a great poet, and the consciousness of unfitness for so high a place in the world’s esteem. Mr. Wright is not a mere rhymester, but at the same time the little book before us can lay no claim to be the production of a great and original genius. *Death the Enemy* is itself a quaint conceit. The poet takes for his text the assertion that cholera first made its appearance in Europe at a

masked ball at Madrid ; and *Death the Enemy* is an attempt to allegorize the strange incident. The revelry is at its height ; the merry dancers are busy, tripping the light fantastic toe ; the gay dresses—

“ All costumes fit to cover deeds

“ Of darkness and the night”

—disguise for a time the true features of those assembled in that “ sensual hall”—

“ Wild haggard faces, stamped by care ;”

when from the crowd glides a strange guest, whose appearance is thus described :—

“ But there stalked among the dancers

“ One they knew not, one whose garb

“ Marked him as an Eastern stranger ;

“ In his hand there was a barb

“ Covered with fantastic figures,

“ Ending in a knotted scourge,

“ Whilst mysteriously he chaunted

“ Music like a moaning dirge.

“ On his robes were tongues of fire,

“ Gleaming with a smouldering light,

“ And upon his staff there glittered

“ Dazzling spots like stars of night.

“ But awhile among the dancers

“ Moved he on with stately mien,

“ Hidden were his hands, the mantle

“ Wrapped around the scourge unseen.

“ In wide folds fell down his raiment,

“ Sweeping noiseless on the ground,

“ Whilst his head erect and covered,

“ By the massive folds was crowned.”

The “ Eastern stranger” is closely followed by another, who vainly attempts to conceal the horrid features of Death. Cholera now takes his seat, and speedily clears the room with his baneful scourge, until at length Death is left dancing alone to the rattle of the bones,

“ Which mocking beat

“ The fatal time ;”

or, as the same idea is repeated further on,

“ The bones of Death a measure beat

“ In solemn mockery.”

The idea is horrible ; the language highly coloured and excited. But Mr. Wright likes to be horrible. He mainly writes

of devils, demons, and dead men's bones. He has discovered that we all "live in a graveyard," that the whole universe is full of human dust, that we breathe it and eat it, yea!—

"We devour it in every meal."

Even the *Voice of the Ocean* turns out to be nothing more than the rattle of dead men's bones. And he hugs these nasty ideas, and fondles them, and dotes so upon them that at last one begins to suspect that all is not quite right with our friend. A residence in this country has doubtless told upon a naturally morbid constitution, and he has gone on dreaming of death, and devils, and hell, until his morbid susceptibility finds its climax in the lines;—

"Thy lot is happy—happy thou wilt be,

"Oh childish idiot, I envy thee!"

After this we strongly advise the Poet-Professor to take leave, and rusticate again for a time on the banks of the Cam.

Death the Enemy is one of the best poems in the volume, but it is marred by a want of rhythm in places; as in the lines,

"Discord drove away concord"

"Who can dance when death playeth?"

In fact, Mr. Wright's chief blemish is the unequalness (so to speak) of his writing. It is impossible to read his prettiest poem through without being haunted by the certainty that something monstrously weak or ridiculous will obtrude itself before the close. There is an elegant little thing beginning—

"Tell me where the eager fountain,

"Dashing flakes of crystal spray,

"Boasts of unpolluted waters

"Always flowing every day."

But at the end of the very firsts stanza the imagination of the poet finds its bathos in the line,

"There is mud in the deep, deep, deep!"

Again, *The Clock and the Heart* is a pretty poem enough as far as it goes, and the last stanza is particularly good; but what is to be said of such a one as this?—

"Say, what doth the heart tell?

"Blood throbbing,—Throbbing blood,—

"Lurking within its fleshy cell,

"It pulls the rope and rings the knell,—

"Thud, thud,—Blood, thud.

"The red warm streams of life blood flow,

"That is the way the heart doth go."

Mr. Wright must have been thinking of the old nursery rhyme—

Trot, trot,—trot, trot,—

That is the way the farmers go.

The following passage from *A Night in the Meadows* is perhaps an average specimen of Mr. Wright's style:—

"Once and again its crystalline surface,—

"In whose reflection, bright as a mirror,

"As in a painting, trees, hills and flowers,

"All are depicted,—this glowing surface

"Now is disturbed by the sporting of fishes.

"High in the soft calm air of the twilight,

"Out of their element into the sunshine,

"Sporting on sunbeams, leaped the glad fishes.

"All else was still, save chittering, chattering

"Of the gay birds, who in the exuberance

"Of their aerial æther-drawn spirits,

"High in the air on trees and on summits

"Were singing and singing."

This passage is both rhythmical and suggestive as a whole, but it contains blemishes which are either the result of great carelessness, or show that the poet does not fully realize the scene he is portraying. How, for example, can the fishes leap into the *sunshine* in the *twilight*? We always thought that twilight commenced with sunset. And surely an article has dropt out from the expression "save chittering, chattering of the gay birds," and it need not have been omitted for the sake of the metre. The last line too, to our mind, is rather 'sing-song-y.' So, in the movements of the serpent there might have been a little more *unity* in the description. We first read that "*creeping and crawling*" "*darted a serpent.*" "*Slowly the snake crawled;*" while but two lines after he "*rolled on the flowers*"—

"*Darting with swiftness*

"*Springing with sureness*

"He from the cold grass *leaped* out upon them."

We have some little difficulty, too, in realizing the exact posture of the snake upon the maidens' bosoms.

From the above remarks Mr. Wright will see that we have not been deterred from criticising his writings by the quotation from Pope which he has prefixed to them. At the same time we should be sorry to discourage our author from another and a more successful attempt. The list of Indian poets is too short to allow us to dispense altogether with Mr. Wright's labours. For Mr. Wright has merits, and may yet make himself a name in the field of Anglo-Indian poetry. Only let

him revise his writings with greater care. Let him avoid the pitfalls we have pointed out, and some others which we will not now stay to particularize. Above all, let him throw aside the morbid sensitiveness which hangs like a dark cloud over the present volume, and come forth clothed and in his right mind, singing in a brighter and more cheerful strain.

Notes on the North-Western Provinces of India. By a District Officer. London. 1869.

THIS little book being written specially for English and not for Indian readers, we might not perhaps have considered it our duty to notice it, had we not been struck with the plainspoken straightforwardness, good taste and general accuracy which the author has displayed. If every Anglo-Indian writer who undertakes to instruct the public were to write with equal accuracy and in a similar spirit, we are convinced that the circumstances of this vast empire would be infinitely better understood and appreciated.

The "Notes" before us mainly relate to the agriculture and land tenures of the North-Western Provinces. The first chapter gives a concise account of their area and population, and the opportunity is taken to contrast the agency at the disposal of the Government with that in Lower Bengal, where "the links which connect the English officer with the native population are wanting." The next chapter treats of "the soils," and in connection with this subject the writer insists on the necessity of cheapening the supply of firewood, so as to enable the agriculturist to utilize manure for the improvement of the land, instead of consuming it as fuel. The erroneous impressions which still prevail in regard to waste land in India are also fully exposed. Chapter III treats of "the crops"; Chapter IV of irrigation, on which subject the writer has some interesting and valuable remarks. He coincides for the most part in the positions set forth in a late number of this *Review*, and in particular condemns the present system of one universal canal rate for every kind and description of land. Chapter V treats of rent rates, and Chapter VI of land tenures. In this, the last chapter, the impolicy of the legislation of 1859 is emphatically pointed out, but the writer strongly discountenances the proposal to endeavour now to undo what ought never to have been done. "On the whole we can, I think, do nothing better than leave things alone. We have made a mistake, and the only thing to be done is to provide against similar errors for the future."

The author's remarks on the Land Improvement Bill are so pertinent that we shall make no apology for extracting them at length.

"There is, I believe, a measure now before the Legislative Council in India, the purport of which is to establish the right of the tenant to compensation for the improvements effected by him. These improvements have, I may say, no other form in the North-Western Provinces than that of wells for irrigation. As I have before explained in the note on irrigation, these wells may be either of masonry, or mere holes dug in the earth. If they are of masonry, the tenant must, by the ancient custom of the country, obtain permission from the landlord to sink them. If they are of the latter kind, the tenant is as much bound to dig them as he is to plough the land. And he would be as fairly entitled to compensation for the cost of tillage, as for the expense of making these wells. The object of the proposed legislation is, I conceive, to give the tenant right to sink masonry wells, and compensation, in case of eviction, for his expenditure.

"This is an infringement on the long recognized rights of the proprietors; and it is a greater injury to them than may at first sight appear. For what class of tenants may be expected to take advantage of this privilege? Clearly not tenants-at-will, who seldom have the means, and without the permission of the landlord can never have the opportunity, of sinking a masonry well—a work which cannot be done in a day. No; it is the tenants with right of occupancy, in whose favour this legislation will be. They can proceed to sink their wells without any danger of eviction, and can then profit by the irrigation without any fear of having their rent raised; for the landlord is prohibited from raising their rent on the ground of any improvement effected by them. The great means, therefore, which a landlord had of increasing his rental, by improving his estate, will be taken from him.

"A very strong case ought to be shown by the tenants before this measure becomes law. And certainly the landlord ought to be carefully heard and consulted.

"If it is shown that the tenants are ready to expend capital in masonry wells, and that, by the present state of the law the spread of irrigation is checked, a very strong case for legislation will be made out. But I very much doubt whether any thing of the sort can be shown. As far as my experience goes, the number of tenants who are able or willing to sink wells is very small. But if they are permanently secured against an increase of rent, it will be well worth the money-lenders' while to advance capital

"on the security of their holdings. Perhaps this is what the framers of this measure have in view. But the real way to enure increased well irrigation is, to advance money to the landlords freely for the purpose. Their rents will then be increased, and the revenue will eventually benefit by it. In the other way, unless the tenant has capital of his own, which I take to be a very rare case, the money-lenders of the village will reap most of the direct profit. What need there is to press on this measure, I know not. Certainly there was no outcry on the part of the tenants, yet the matter was, I think, not a year under public discussion before the Council was pressed to pass it."

The British Expedition to Abyssinia, compiled from authentic documents. By Captain Henry M. Hozier, 3rd Dragoon Guards, Late Assistant Military Secretary to Lord Napier of Magdála. London. Macmillan & Co. 1869.

THOSE who were in England last year will not have forgotten the thrill of joy which shot through the country on receipt of the telegram, announcing the rescue of the Abyssinian captives and the fall of Theodore's stronghold. Nor was the enthusiasm of a nature soon to subside when the first flush of victory had died away. The circumstances attending the Abyssinian campaign will always remain a remarkable page in the history of the world. The expedition itself had a wider significance than appears at first sight, while the success with which it was crowned has had its due influence in vindicating the position of England in the political arena of Europe. In sending an army to Abyssinia, England exhibited a sensitiveness in regard to the national honour for which people were slow to give her credit. While taunted with being a nation of shopkeepers, and really desiring peace above all things, she showed that there were certain insults which could not be suffered to pass with impunity. And, while thus silencing those who of late have taken pleasure in detracting from her good name, the brilliancy of Lord Napier's achievements, the successful advance into the heart of an unknown, difficult and dangerous country, the swiftness of the vengeance meted out, and the wonderfully insignificant loss incurred—have proved that, however reluctant we are to go to war, the most sudden outbreak of hostilities will not find us altogether unprepared. The Crimean war and the Indian mutiny taught us a lesson which, we trust, may never be forgotten. In this respect, indeed, the late expedition

is a source of peculiar gratification. It was emphatically a trial of our resources in just those very points in which they were always believed to be weakest. "In the Abyssinian campaign the enemies to be feared more than the open foe were natural obstacles and starvation." But our sappers and miners, our transports, our intelligence department and commissariat, were all equal to the occasion. In the land transport indeed there does seem to have been a hitch at the outset, but the energy of the British character triumphed over all obstacles, and the service was successfully re-organized on the spot. And then, the captives liberated and Theodore removed by his own hand—we returned by the way we came, seeking no further vengeance, despoiling no one by the way, but paying honestly and possibly extravagantly for everything which our army required. The world scarcely knows whether to admire most the excellent organization which ensured success, or the moderation and clemency with which that success was associated.

Captain Hozier has written a very interesting and readable narrative of the campaign. The first fifty pages are occupied by a recital of the circumstances which led to the expedition; the materials being mainly drawn from Dr. Beke's work, which was fully reviewed by us two years ago. The next 150 pages are taken up with the advance of the army stage by stage on Magdála,—a portion of the work which loses some of its value for want of a good map and plans. The surrender of the captives, the storming of Magdála, and the return march fill seventy pages more. The book is emphatically a military history of the expedition, and throughout the narrative the writer takes a quiet pleasure in dwelling upon those unusual difficulties which had to be surmounted, and which were successfully surmounted, by our army. The following passage is an instance:—

"Never were operations carried on in a country so unfavourable to war: the very base of operations, where at the end of July there was a population of about 12,000 men and animals, had to be supplied with water from the condensers and from the shipping. An accident to a delicate piece of machinery, or the breaking of the valve of a pump, caused the stock of the precious fluid to run short, and inflicted a great inconvenience in the camp, where the water had to be doled out in daily portions of limited quantity, and a reduction of the ration told heavily on man and beast. A storm of sufficient severity to drive the condensing ships from their anchorage would have caused a terrible calamity. To provide against such an accident,

“every effort was made to provide a reserve of water in a great reservoir, which was formed partly of ships’ tanks, and partly of a tank sent in pieces from England and put together on the spot. There was no timber in the country ; there was no stone near the seacoast ; every block of coral and every beam of wood for the construction of piers or storehouses had to be imported ; every inch of rope had to be brought from the ships ; every yard of road had to be made to allow the convoys to pass ; every boat had to be brought to the coast for the disembarkation of troops and stores.” (p. 97)

At the present season, while our memory retains its recollection of the brilliant pageants we have lately witnessed, it may not be uninteresting to contrast with our oriental splendour the following picture of a durbar in Abyssinia :—

“At the further end of the circular tent was a small couch covered with silk cloth, on which the prince took his seat, and placed Sir Robert Napier at his side. The Abyssinian officers of high grade sat round the tent on the floor at the left-hand side of their chief, while the English also seated themselves on the ground to the left of their commander. The scene was mixed and striking. The afternoon sun shone through the red tent, and lighted up with a crimson hue the robes and silken skirts of the Abyssinians and the uniforms of the Englishmen. Girls, bearing large baskets of Abyssinian bread and curry, came in and placed them on the ground in front of the visitors, who were requested to eat. The bread was brown, formed in flat circular cakes, about a foot in diameter, and had a slightly sour taste. Very little sufficed to gratify curiosity, although it was permitted that each guest should help himself. In general, in Abyssinia, the servant who brings in the loaves and curry, rolls some of the latter in a piece of the former, and after kneading it into a ball thrusts it into the mouth of each diner. After enough had been eaten, other girls entered bearing huge bullock horns filled with ‘tedj,’ a drink made from fermented honey. This ‘tedj’ or hydromel was poured into Florence flasks, one of which was given to each guest. It was expected that the recipient should bow towards the prince and then empty his flask. No sooner, however, was the vessel emptied than it was seized by a watchful servant and again replenished. Each had to drink several flasks of the liquor, which tasted not unlike small beer, but rather sour. After a while, when many flasks had been emptied, musicians were introduced. The band consisted of six men who played on long pipes

“ which uttered wild but not unpleasant music. A war song
“ was then sung by a minstrel, and all the Abyssinians joined
“ in chorus. The entertainment was now drawing to a close,
“ and the presents were brought in which were to be bestowed
“ upon the British Commander-in-Chief. He was first invested
“ with a silver-gilt armlet, the sign of a great warrior. Then
“ a lion’s skin and mane, the mark of a fierce fighter in battle
“ were placed upon his shoulders, a sword was girt upon his side,
“ and a spear and shield for him were handed to one of his
“ staff who acted on the occasion as his armour-bearer. The
“ meeting then broke up. Kassai, after frequent hand-shaking,
“ accompanied the General to the door of the tent, where a grey
“ mule caparisoned with Abyssinian saddlery and housings was
“ waiting. On this Sir Robert Napier had to mount, and again
“ accompanied by the Abyssinian army rode down to the Diab,
“ where the Abyssinians halted. The English General and his
“ staff rode into their own camp, but the shades of approaching
“ night prevented the soldiery from witnessing the return of
“ their leader in such an unwarlike guise.” (p. 132).

These extracts must suffice to give the reader an idea of what he may expect to find in Captain Hozier’s pages. Pending the publication of Mr. Blanford’s report, we are unwilling to dwell at greater length upon the circumstances attending the expedition. We hope, however, before long to revert to the subject; and to be able to discuss it with the advantage of the additional information and interest which Mr. Blanford’s work promises to yield.

The excessive expenditure which the campaign involved, has called down severe criticism upon those entrusted with it, both in England and in this country; not so much perhaps that the nation grudges the cost of so brilliant an undertaking, as because the actual expenditure so very largely exceeded the estimates, and the public was very naturally indignant with those who were responsible for the gross miscalculation. Captain Hozier traces this responsibility mainly to the Indian authorities, and in particular to the Government of Bombay, whom he accuses of disregarding Sir Robert Napier’s representations, and of listening to others who were not so well qualified to give advice. We are not in a position to pronounce upon the merits of this statement. The reputation of Indian financiers at present is not high, but even were our arithmetic of a higher order, India must always, we suppose, be made the scape-goat in any contest with the Home Government.

Would indeed that the tyranny of the Home authorities was confined to words! But there are some people in England who consider they have a right to rob our exchequer first, and then abuse our arithmetic. Wherever the fault lies in the present case, however, no one will deny that the Abyssinian war was a glorious enterprise, and the cost, enormous though it was, was perhaps justified by the importance of the results which it both directly and indirectly achieved.

A Comparative Grammar of Sanscrit, Greek, and Latin. By William Hugh Ferrar, M.A., Fellow and Tutor of Trinity College, Dublin. Volume I. London: Longmans, Green, Reader and Dyer. Dublin: William McGee, 18 Nassau-Street. 1869.

THIS book will supply a want. It has long been felt by classical scholars that K. O. Müller was right in his *dictum* that classical etymology, if it is to hold its ground as a science, must borrow the aid of comparative grammar. And although philologists of the old school, like Hermann and Lachmann, have poured out the vials of their wrath on those who desert the fount of Castaly for the muddy waters of the Ganges, the number of Latin and Greek scholars who master the rudiments of Sanscrit philology is gradually increasing. Such students, on commencing the study of Bopp's great and exhaustive work, are apt to be discouraged by the chaos of forms presented to their view. They wish to apply the methods of Sanscrit grammarians to the classical languages of Europe, and do not care to have their attention distracted by Slavonic, Armenian, Lithuanian, and the other less known members of the Aryan family. It is for this class of readers that Mr. Ferrar's work is written. The author has neglected none of the last lights, and seems to have carefully digested all the results of German investigation. He begins, as every writer on the subject should, with phonology, which must no doubt, as the science progresses, become the most important part of comparative grammar. He then treats of the Indo-European language or *Ursprache*, which must be supposed to stand to Latin, Greek and Sanscrit in the same relation that Latin does to the Romance dialects. Three chapters are devoted to the Latin, Greek, and Sanscrit alphabets; and the author then proceeds to compare the corresponding forms in the three languages. This volume ends with the pronouns. The second volume completing the work is expected to appear in January 1872.

The method and arrangement of the work is excellent, but we regret to see that the style is too erudite for the average English school-boy. Of course no Indian student would derive any benefit from it; as no room is found in this country for the teaching of classical philology, which is clearly not one of the bread and butter sciences.

A short extract will give a better idea of the book than can be gained from any description. In treating of the Indo-European alphabet the author observes:—

“*v* allows consonants to stand after it, which is hardly ever the case with *y*. It is frequently interchanged with *b*. In *drapsa* (a drop) from *drav* (*dru* gunated), the *v* is changed into *p* on account of the following hard *s*, as in modern Greek *ἐκλαψα* from *ἐκλανσα*. The interchange of *b* and *v* is of frequent occurrence, as L. *habere*, Fr. *avoir*; L. *cantabam*, It. *cantava*; *berber* (in Salian hymn) = *fervere*; Vesuvius = Βέσβιος;—ber in September, Skr, *vāra* (time); Vesontio = Besançon.”

Here we feel inclined to remark that Mommsen's explanation, who considers *berber* in the Salian hymn to be equivalent to the later Latin *verbera*, would be more suitable for Mr. Ferrar's argument than the explanation which he adopts, which has, however, received the high sanction of the late Dr. Donaldson. It is a pity that Mr. Ferrar did not quote Scaliger's amusing epigram—

“Haud temere antiquas mutat Vasconia voces,
“Cui nihil est aliud vivere quam bibere.”

There are some other little points on which a difference of opinion might exist. For instance, Curtius, the celebrated Greek scholar and comparative grammarian, considers that *Ιάορες* is the same word as *yavanas*, and that in this word the *i* represents a Sanscrit *y* as in *yá* = *ieva*. On this Mr. Ferrar justly observes: “Curtius is wrong here, for *yavanas* is a borrowed word. *Ιάορες* however may be equivalent to Sanscrit *yuvānas*.” We believe this theory has the support of no less an authority than Professor Lassen. It is based upon a supposed sentimental nomenclature, the Western nations being looked upon as the youth of the world.

It may be asked though, if *yavanas* is a borrowed word, from what language is it borrowed? Undoubtedly it is identical with the Hebrew *yáván*. The probable account is that both Greeks and Hindus borrowed from the Semitic nation. The passage in Homer in which the word *Ιάορες* occurs, is generally supposed to be a later interpolation.

In spite of the sarcasms of Voltaire, comparative grammar has always been a fashionable study, and the genius of Max Müller has secured it a large degree of attention from the present generation. Those who have waded through the three volumes of the veteran Bopp, the real founder of the science, will find much that is new and interesting in the present volume. And there may be many educated men in this country, for whom linguistic studies possess a peculiar attraction, and who would be glad to possess in a readable form a summary of the newest views on the subject. Max Müller's brilliant lectures do not enter into details, and can scarcely be considered as a treatise upon comparative grammar. Mr. Ferrar's book is shorter than Bopp's, more popular and appetizing than Schleicher's most uncompendious compendium, and more full and satisfactory than Clark's meagre abstract. It is no doubt the best treatise upon the subject as yet published in English, and we venture to prophesy for it a favourable reception, both in this country and in England.

The Law of Landlord and Tenant as administered in the Courts of the Bengal Presidency, Lower Provinces. By E. H. Whinfield, M.A., Bengal Civil Service. Calcutta, Wyman & Co. 1869.

The Rent Digest, or the Law and Procedure relating to Landlord and Tenant in the Bengal Presidency, with more special reference to the North-Western Provinces. By W. Irvine, B.C.S., Calcutta, Wyman & Co. 1869.

ONE sign of the superior legal acquirements of the present generation of Indian civilians over those of former days, is to be found in the frequent issue of text-books on the subject of Indian Law, edited by junior members of the Service. Beaufort and Harington have had many successors, among whom Chapman, Prinsep, Field, O'Kinealy, Currie, and Whinfield are, perhaps, the best known names, but with whom the supply appears by no means to be exhausted. The name of Mr. Irvine, the editor of one of the volumes now on our table, has to be added to the list, and we observe from a notice elsewhere, that before long it will be still further swelled by the addition of another, and by no means unworthy name.

The labours of these men have been chiefly given to the exposition of criminal and revenue law, the only branches of which the majority of them have hitherto had experience.

Mr. Field's hand-book on the Law of Evidence is, however, a most creditable specimen of what they can do in other directions, and it is only natural to expect that when promotion introduces them to other branches of the law, even Macpherson, Thomson and Broughton will find some not unworthy competitors among them. We think that with the results even now before us, and looking to the increased attention which is given by the Civil Service Commissioners to their legal training, and (what is of far more consequence) the attention which is being given to it by themselves in Inns of Court and elsewhere, their request to be tried before they are condemned on such criticism as that of a recent Edinburgh Reviewer, must be considered a modest and reasonable one.

Mr. Whinfield's model has been Smith's "Law of Landlord and Tenant," the questions that arise between the parties being treated, as far as possible, chronologically. For this method of treatment he gives in his preface very good reason when he says that it "appears preferable to the ordinary one of arranging the subject in the order of the sections of Act X, because "Act X is not a complete code of the substantive law, and "its sections, therefore, do not afford a sufficient number "of heads to range the various cases under. It is quite silent, "for instance, on such important matters as the powers of "of various landlords to grant leases, the rules as to cesses "and rent in kind, the rules as to payment of rent and "appropriation of payments, the rules as to enhancement of "talukdars' rent, the landlord's obligation to maintain the "tenant in quiet possession, the tenant's right to alluvial "increments, the landlord's obligation to give notice to his "tenants on transferring his estate, the rules as to cancelment "of leases by sale of the landlord's estate for arrears, &c., and "besides these omissions, portions of the substantive law, "intimately connected with one another, appear in the Act at "widely distant intervals."

We think that Mr. Whinfield is right. Owing to the form of the authorized edition, edited by Mr. Chapman, we have become accustomed to see the sections of the law given in order, with the abstracts of kindred decisions, and such notes as there may be, printed under each section. For this plan there is much to say when the law is complete in itself, and has been arranged carefully in the first instance. There is also a convenience of reference, as well as of correction and addition thereby obtained, which is of considerable value; but for a

complete hand book of the law there can be no doubt that Mr. Whinfield does well in following the English model.

We cannot perhaps give a better view of Mr. Whinfield's book than by quoting from the table of contents the titles of his chapters. Chapter I discusses the "various kinds of tenancy," with subordinate heads for the tenancies of middlemen and of ryots, service tenancies, and mortgage tenancies; chapter II, "creation of tenancy," sub-divided under the heads "who may lease," "who may be lessees," "what may be leased" and "mode of leasing"; chapter III, "continuation of tenancy" (rights of landlords); chapter IV, "continuance of tenancy" (rights of tenants); chapter V, "determination of tenancy;" chapter VI, "change of parties during tenancy;" chapter VII, "resumption of invalid rent-free grants;" chapter VIII, "suits against agents;" and chapter IX, "the procedure of the Revenue Courts under Act X," the last chapter occupying three-fourths of the book, and appearing to omit nothing.

In treating of the various points that are discussed in these chapters, there has been a very full use of most that has been published on the law itself, while such works as Harington's *Analysis*, the "Fifth Report," Brigg's "Land Tax of India," Wilson's *Glossary*, and Smyth's "Zemindary Accounts," have also been freely consulted.

It is impossible without using the book for some time for reference in practical work, to say whether it is as full and correct as it ought to be. There is an awkward list of addenda extending over a dozen pages, which shows that in this respect something has to be done in a second edition. It at the same time shows that Mr. Whinfield has honestly done his best to attain completeness in one way or another, and he of all men, writing as he does from Noakhali, may plead the difficulties and delays of publishing in India. It must also be recollected that, even if these were overcome to the same extent as in England, the weekly amount of High Court decisions, giving even now after a decade for the first time important interpretations of the law, or modifying or reversing previous decisions, makes a near approach to complete accuracy an utter impossibility. This one difficulty is, we should think, enough to break the heart of any editor of Act X. No allowance, however, requires to be made in our criticism of the book on its historical and general side, and we may say at once that we think it needs none.

The account of the various kinds of tenancies, and the chapter on the "creation of tenancy," are, to our thinking, particularly good, and are synopses of what is known on these subjects, such as are to be met with nowhere else. There are, as may be supposed, many points of interest in these chapters, but few of which, however, it will be in our power to note. In a short account of putnee taluks at pp. 12 and 13, we find the old question of the derivation of the word "putnee" raised. Wilson was divided in his view between the ryot's "patta" (a lease) and "pattan" (colonizing), according as it is written with the cerebral or dental 't.' The Sudder Court and Harington are for "pattan," the latter quoting in support of his view the common form of words in putnee and other leases, "Having established (pattan kariya) you, &c." We have always held that there is another argument in favour of this, which, there can be little doubt, is the right derivation, in the common pronunciation of the first syllable in these words. We believe that most of our readers who know Bengali, and have been used to hearing the words pronounced, will agree with us that in *patta* it is almost 'put'; while in *putnee* as in *pattan*, the sound is in the mouth of the unanglicized Bengali as near as may be 'pott.'

Under the head of "farms," p. 13, we find quoted from Harington, the opinion of Gholam Hossain Khan, author of the *Sair Mutakherin* and son of the Nazim of Behar, given in a paper furnished about 1785 to Sir John Shore, to "the effect that the farming system is, as it were, selling the *ryots* and the country to the farmers." Mr. Whinfield goes on to say:—"It is believed that this opinion will be endorsed by everyone who has considered the question. Even at the present time farmers sometimes take a lease of an estate at a rent equal to the entire rental paid by the *ryots*, trusting solely to their powers of exaction for a profit. One middle-man between the *zemindar* and the *ryots* is the utmost that should be allowed."

The question here raised is too large a one to be discussed in a short critique, but we cannot let Gholam Hossain or Mr. Whinfield either pass without remark. Without any reference to the establishment of a claim to have considered the question, we are quite ready to endorse the opinion of the former gentleman. We would even go farther and leave out the "as it were." The statement is but a simple one of fact, the transaction being neither more nor less than an act of sale by the *zemindar* or

superior holder to the farmer. But of course Gholam Hossain and Mr. Whinfield intend that "sell" should be taken in an other than the common sense in which we are using it. We would then ask, why should the infamy of the transaction, if such there be, all be visited on the head of one party to it, while the other escapes unblamed? The zemindar, because it pays or in some way suits him to do so, sells his rights to the farmer. He makes the best bargain he can for himself, knowing that the farmer will make the best bargain he can for himself. What right has he, under those circumstances, to hold up the farmer to public odium, as if the whole blame of high rents lay with him alone? The illustration given by Mr. Whinfield cuts both ways. The case cited is unfortunately not uncommon, but who is it that makes the farmer give so high a price for his farm but the zemindar, and is not the zemindar, who can produce this state of hardship *per alium*, just as guilty as if he were to do so *per se*, and all but certain to do it for himself on occasion arising?

The zemindar shows great judgment in transferring the odium from himself, but we are afraid that is the most that can be said for him. He seems to us the guiltier of the two. There are many reasons why it is desirable to see the number of middlemen reduced; but suppose Mr. Whinfield had his will, and one middleman between the zemindar and the ryots were the utmost allowed. Giving compensation for existing rights, we should have to leave rents as they are in the first instance; after which, as it is hardly necessary to point out, the middlemen so thrown out of their position and means of livelihood, would but enter into competition with the zemindars, the remaining middlemen, or the ryots, and though there might be a temporary disturbance of the land-market, there could be little or no real change in the end. If the land market be overstocked with buyers, some of them might, no doubt, be driven into other markets, but legislative enactments never did much towards *settling* such questions yet, and, until the nature of the people change in India, never will.

After all, does Mr. Whinfield think that the zemindar would not take the most he could out of the one middleman, and the middleman again all he could out of the ryots—that each would not go as far as the rights of others would let him?

Government will do its duty if it maintain those rights, leaving matters of demand and supply to adjust themselves.

Mr. Whinfield shows equal decision of opinion, of which the Chief Justice has to bear the brunt, in some notes on the Ishwar

Ghose and Thakurani Dasya cases. We might have had something to say about them, but space prevents our making further extracts, and warns us to bring our comments to an end.

It is unfortunate that the book should have been brought out so near the time of Act VIII of 1869 becoming law, but we trust that Mr. Whinfield will get such encouragement as to induce him to bring out a second edition incorporating all the changes. In anticipation thereof we would suggest to him that an alphabetical list of the cases quoted would, for purposes of reference, be a most useful addition to his book.

In conclusion, we may say that we consider Mr. Whinfield's book one which every one concerned in the administration of the rent law in the Lower Provinces, may with advantage possess, and for which the large class of officers who have examinations to pass, and all students of the law, will specially thank him.

Of Mr. Irvine's Rent Digest we quote, as a very appropriate one, the description which we find with his publisher's advertisement elsewhere. "In this work, an attempt has been made "to present a complete view of the Law of Landlord and Tenant "prevailing in Bengal, as contained in the old Regulations, "Act X, 1859, Act XIV, 1863, the Rulings of the High "Court, Calcutta, the High Court, North-Western Provinces, "and the circular orders and letters of the Sudder Board "of Revenue, North-Western Provinces. The sections of Act "VIII, 1859, applicable to the Revenue Courts and the whole "of the Sale Law, have been incorporated. The two principal "divisions of the book are into (1) Substantive Law, and (2) "Procedure. Under these two divisions each subject has its "appropriate place allotted to it, and by this means the law "on any matter, together with the rulings and orders with "reference to it, can be ascertained without labour or research. "Nowhere have the rulings of the two High Courts, bearing on "Act X, 1859, been before collated."

Mr. Irvine follows the same method as Mr. Whinfield in the arrangement of his book, and although he does not appear to have adopted any particular work as a model, we observe that the same principle of chronological arrangement has been practically recognised by him also. His leading divisions are—of landlords and tenants—of rent—of pottahs and kuboolyuts—of distraint—of the determination of tenancy—of suits in general—of suits from plaint to decree—of applications for execution—of appeals—of reviews—of pleaders and revenue agents. These

divisions again fall into a great number of sub-divisions. It is out of our power to quote them, but we may say that they seem to be made very carefully, and that we can detect no omission among them.

Mr. Irvine is, however, by no means content with this the ordinary amount of sub-division. The body of his book is broken up into separate paragraphs, each complete in itself, and numbered consecutively. When we add that these conclude with a full quotation of the authority or authorities responsible for the matter of the paragraphs, and that each has an admirable marginal reference to itself, that there are further index lists of every kind of authority quoted with their years, numbers, dates and the page and paragraph of quotation, the whole winding up with an excellent alphabetical index of subjects, we think we shall have made it clear that everything which an editor can by any possibility do for such a work, has been done by Mr. Irvine, and that a book more admirably suited for reference there could not well be.

To make it such was evidently the great object of the editor, but there is no want of question or comment where the occasion arises, and we cannot say more for these notes than this, that we have not found one of them that is not valuable and thoroughly to the point.

It is a misfortune, in great part unavoidable as we have already shown, that the book has not been brought up later than to March 1868, but the form in which the matter is given, makes it by no means a hard task to make the necessary corrections. The defect is one which we shall, no doubt, find materially lessened in a second edition. Unfortunately a second edition of a book like this is not possible to assistant collectors—the class to which we see Mr. Irvine still belongs—without liberal support being given to the first edition. But we do not doubt that the North-Western Government is not less liberal in these matters than the Government of Bengal, which has, to its great credit, and we may add to the great advantage of its judicial administration, never failed to give its support to all such works as this brought out by its own servants.

We cannot better sum up our opinion of Mr. Irvine's book than by endorsing his publisher's belief that "the book is calculated to be of the greatest assistance to the revenue officer in his judicial capacity, or to other persons with powers under the Rent Law."

The Law of Inheritance from the Mitacshara, translated by H. T. Colebrooke, Esq., with an Appendix, containing a table of Succession and a collection of precedents from the decisions of the Privy Council on Indian Appeals, and of the Sudder and High Courts of the three Presidencies, and an Index. By a Pleader of the High Court. Calcutta. 1869.

IT may be hoped that the day will come when our legislature will recognise the expediency of codifying the chaotic mass of institutes, commentaries, digests, and often conflicting precedents, on which our courts are at present obliged to base their decisions in all matters involving a reference to Hindu Law; but in the meantime we must be grateful to the authors of books, which, like the present treatise on the Law of Inheritance, make the existing authorities easily accessible.

The *Mitacshara*, as an authority recognised by all the schools but that of Bengal, is one of the most valuable of Hindu law books, and the present edition of Colebrooke's translation of the chapters relating to the law of inheritance, contains the invaluable annotations of the translator, and a collection of precedents, as well as a table of succession and an index. It is, therefore, a most useful book, but the editor would have done well to insert the precedents in their proper places, instead of throwing them into an appendix, and to pay a little more attention to the external form of his book, which, though published at the "*Bengal Superior Press*," is printed in decidedly inferior type, and on a coarse yellowish paper.

Elements of Arithmetic, theoretical and practical, designed for the use of Schools. By Charles D'Cruz, Head Master of the Bengal Academy, and author of a treatise on Practical Book-keeping. Calcutta. 1870.

"**A**RITHMETIC," as Mr. D'Cruz rightly remarks, "is an important study, and peculiarly demands the attention of youth." This great truth has, we believe, been recognised by other writers on the same subject, but there is probably room in the market for a manual like that of Mr. D'Cruz, containing questions and examples referring to Indian scales of weights and measures, and the pompous style of the preface will not affect the practical utility of the book.

VERNACULAR LITERATURE.

Samáj-Samskaran. By Nabín Chandra Mukhyopádhyáy. Calcutta. Jadu Gopal Chatterjea and Co's Press. B. E. 1276.

THIS is one of the most interesting books in Bengali we have read for a long time. Amid the rubbish of so-called epic poems, dramas and novels which the vernacular press is daily producing, it is refreshing to find a volume filled with essays on the reformation of native society, written in a clear and manly style. It is not always that we agree with our author; nevertheless he possesses no small share of common sense and a considerable degree of earnestness. The book (it consists of 153 pages of large octavo size) contains fifteen essays on the following subjects:—(1) On the system of education; (2) On liberty and its blessings; (3) On kulinism; (4) On early marriage; (5) On female education; (6) On the articles of food; (7) On fish and flesh as food; (8) On the evils of drunkenness; (9) On sleeping in the day; (10) On gambling; (11) On adultery; (12) On the good and bad effects of company; (13) On following one's own national religion; (14) On polytheism; and (15) On the worship of God. We shall notice whatever appears to us to be interesting in each of these essays.

In the essay on Education the author assails the system of teaching pursued in Sanscrit *toles* by the pundits, who insist on their pupils learning the whole of the Sanscrit grammar by heart. We do not think this is a bad system at all. A thorough knowledge of the grammar of a dead language is essential to a knowledge of the language itself; and as memory is very powerful in boys, the pundits could not have adopted a better system—a system, too, which has the authority of Eton and other English public schools in its favour—than that of making boys commit to memory the rules of grammar. Inaccurate and superficial scholarship is the result of a different system of teaching. The writer blames the Calcutta University for fixing upon 16 years as the age of those who go up to the Entrance Examination, such a rule in his opinion making boys over-studious at the sacrifice of their health. He evidently forgets that 16 years is the *minimum* age prescribed by the University. He thinks Government is culpable in not introducing physical education into its schools.

In the essay on Liberty and its blessings, our author freely gives it as his opinion, that of all forms of government the democratic form, like that of the United States and the Cantons

of Switzerland, is the best. Foreign domination, though attended with great material prosperity, is, in his opinion, not to be preferred to comparative barbarism accompanied with independence. He thinks that the rule that all native subordinates should go to office at 10 o'clock in the morning is an oppressive one, for two reasons—*first*, because food taken into the system so early is not easily digested; and *secondly*, because the orthodox Hindu cannot go through all his devotions before 9 or 10 o'clock. He exhorts his countrymen not to take Government service, but to betake themselves to trade and agriculture. He concludes this essay with the following appeal to his countrymen:—"Natives of India, remember the original condition of the present Europeans. Remember that you were once the foremost nation on earth. Where is that culture, that intelligence, gone? Where is that prosperity, that union, that skilfulness in war? Where is that moon-light of fame which shed effulgence on every nation of the world? What a calamity, that that nation whom you despised as Mlechhas, you should now have to adore with folded hands, merely in order to gain your means of livelihood. With God nothing is impossible. He can do all things."

In the essay on Kulinism the author vigorously assails the system of polygamy, pointing out its obvious evils, and showing that it is a mere human institution, unacknowledged by the religious system of the country. He also very energetically attacks the system of "selling daughters," as it is called, that is to say, of giving one's daughter in marriage to that man who offers the largest bribe,—a system prevalent among a certain class of Bengali Bráhmans. In the essays on early marriage and female education, there is nothing to call for remark, except that our author agrees in thinking with Manu that the marriage of a girl should not be delayed beyond ten years of age.

The three essays on articles of food and drink—the 6th, 7th, and 8th—are the most curious in the whole collection. Our readers may be aware of the fact that Hindus are prohibited from using fifteen sorts of vegetables during the fifteen days which elapse between the new moon and the full moon, or between the full moon and the new moon. We give here a list of the forbidden articles. On the moon's conjunction or opposition Hindus must not eat pumpkin; on the first day of the moon's increase or decrease, they must not eat *brihatí* (a small fruit); on the second day, *patal*; on the third day radish; on the fourth day, the *sríphal*; on the fifth day, *nimva*; on the sixth day, the palmyra fruit; on the seventh

day, cocoanut ; on the eighth day, also, cocoanut ; on the ninth day, *tumvi* ; on the tenth, *Kalamvi* ; on the eleventh, beans ; on the twelfth, brinjal ; on the thirteenth, *másphal* ; and on the fourteenth, also, *másphal*. This list of prohibited fruits and vegetables is, everyone knows, quite arbitrary. Our author, however, thinks that it is founded on astronomical grounds. Just as the tides of the ocean and certain diseases are affected by the age of the moon, so vegetables, he thinks, may be affected by the attraction of the moon ; and at a certain age of the moon the use of certain vegetables may prove injurious to the body. The eleventh day of the moon's increase or decrease is observed as a fast day by all strict Hindus. This institution is regarded as beneficial by our author, as an occasional rest of the body from food does good to the corporeal system. Our author is strictly opposed to onions, garlic and leeks. He deduces arguments against their use both from reason and from revelation. The arguments from reason are, that the above-named vegetables are heating to the system, and are, therefore, unfit to be the food of the inhabitants of a tropical climate ; and *secondly*, they have a bad smell. As to the revelation, we shall mention the verdicts of two of the inspired sages of antiquity. Yajnavalkya says :—“Onions, garlic, turnips, carrots, the pig of the village, and the cock of the poultry yard, if eaten, require the ceremony of *chándráyana* for taking away the guilt of the sin” ; and Manu, the author of the *Dharma Sástra*, says :—“If the twice-born classes, that is, Bráhmans, Kshatryas, and Vaisyas, eat mushroom, salted pork, the fowl of the poultry-yard, garlic, onions, turnips and carrots, they become degraded.” Our author broadly hints that the consumption of onions, garlic, and other forbidden articles of food, may be the real cause of the modern ravages of malignant cholera. By the way, cholera was known to the ancient sages of India under the name of Visúchiká ; and our author quotes from the *Yogavásishtha* the following *Sloka*, in which Brahma instructs the female Rakshas Súchi as to the description of persons who fall victims to that fearful disease :—

“Durbhojanádurárambhá dukkhá dusthitayaschaye ;

“Durdhesavásino dushtá stesham himsám karishyasi.

that is to say—Visúchiká “attacks those who eat unclean things, who engage in bad works, who are in a distressed state of mind, who live in bad places, and whose characters are bad.” Perhaps the modern sons of Æsculapius may gather some hints from the above verdict of inspiration. Our author is a strict

vegetarian, and proclaims war against the use of fish and meat. There is nothing original in the arguments he makes use of, excepting when he borrows them from the Hindu Śāstras. One of these authorities says—"He who eats fish of choice must abstain from all food for three days as a penance." The same authority has the following—"Anyone that through the lust of "eating kills any animal, shall dwell in Majjakunda for one hundred thousand years, shall become a porpoise and fish through "seven births, and at last shall have his sins atoned for, "and shall become pure after being born as a vegetable." Alas for the beef-eating Anglo-Saxon!

In the essay on intoxication our author falls into a mistake common to most native writers on the subject—the mistake, namely, of making no distinction between the use and abuse of wine. The mistake is not unnatural, as so many Bengalis who drink wine are unable to appreciate its use in moderation. What the Malayan said of himself is probably true of many a Bengali Babu—"I drinkee not for drinkee, but I drinkee for drunkee." Our author vigorously and earnestly denounces drunkenness as the prolific mother of a thousand evils.

In the essay on sleeping in the day, the writer shows the injuriousness of that indolent habit. He quotes a passage from the *Mahābhārata* in which Gāndhāri says to Bāsudeva—"My "sons never slept in the day-time, &c., why have they then been "cut off prematurely?" In the three last essays on Religion, our author maintains that every man is bound to follow the religion of his country, however absurd and irrational it may be, and at the same time, inconsistently enough, declaims against the practice of idolatry in Bengal. He himself seems to be, so far as we can gather, a Vedantist. We have dwelt a little too much, perhaps, on the angularities of our author, but there is a great deal of interesting matter in the book before us, and we have much pleasure in recommending it to our readers.

Sakúntalá. By Hari Mohan Gupta. Calcutta: New Bengali Press. Samvat 1926.

THIS is a translation or rather adaptation into Bengali verse of the celebrated play of Kálidás called *Sakúntalá*. We are glad to be able to speak favourably of the work. The versification is correct, elegant, and harmonious. Babu Hari Mohan Gupta is already the author of two or three books, and we have no doubt that the performance before us will add to his reputation.

Nivátakavachavadha. A Bengali Epic. By Maheschandra Sarma. Calcutta : Giris-Bidyaratna Press. 1869.

THIS is a book of great pretensions. The author calls it a "great epic poem," but if an epic poem be "an expression of the highest human sympathies appealed to by an action of popular interest," then the poem before us is no epic, since it appeals to no human sympathies at all, neither is the tale on which it is founded a sufficiently popular one. Nivátakavacha was one of the Daityas of Hindu mythology, and his death by Arjuna is recorded in the *Vanaparva* of the *Mahábhárata*. But the tale is uninteresting, and is not considerable enough to form the subject of a poem. Kichakavadha would have been a better subject, as the tale is much more interesting ; and Pundit Maheschandra Sarma, who is a native of Dinajpur, might have written it with some propriety, if we are to believe Mr. Wheeler (*History of India*, vol. i, p. 252), that that is the modern name of Viráta, where Kichaka flourished. We cannot say that the poem, as it is, is either useful or interesting.

Ratnavatí. By Mir Musharaf Husain. Calcutta : New Bengali Press. Samvat 1926.

THIS is a romantic tale designed to shew that knowledge is of greater importance than wealth, but as it is founded on the marvellous and the supernatural, it is not likely to be of much use. The author's argument is to the effect that knowledge is more valuable than wealth, since the former enabled one Sumantu to turn some women into apes, while the latter was ineffectual to produce that wonderful result. But as no knowledge that we know of can turn women into apes, the superiority of knowledge over wealth may well be doubted. But we dare say the writer did not intend either to instruct or to argue, but merely to make his readers laugh. We take it that the author has concealed his real name under the *nom de plume* of a Musalman.

Udbhid Bichár. A treatise on elementary Botany, adapted to native youths. Part I. By Jadu Nath Mukhyopádhyáy. Calcutta : B. P. M's Press. Samvat 1926.

BABU Jadu Nath Mukhyopádhyáy is doing good service to the cause of national enlightenment. Some two years ago he published the first part of his work on midwifery in Bengali ;

which was soon after followed by the second part of that highly useful manual. Then came out his *Saríra Pálan*, that is, the care of the body ; and now he gives to the world the first part of his work on Botany. It is superfluous to remark that such popular treatises in the vernacular on scientific subjects are of the greatest importance. We wish other Licentiates of medicine and surgery would follow the example of Babu Jadu Nath Mukhyopádhyáy.

Rámápáler Bibaran. By Prasanna Chandra Guha. Dacca Sulabha Press. 1869.

THIS is an interesting little book of 77 pages, containing a description of the village of Rámápál in the vicinity of Bikrampur in the district of Dacca, the dwelling-place of Ballál Sen, the Hindu king of Bengal. The ground about Rámápál and the adjoining villages is full of bricks, which fact shows that in former days numerous brick buildings stood there. With the exhumed bricks many people have built large houses in the present day ; and in many places gold and silver coins and precious stones have been found. Amongst the ruins of Rámápál the writer notices the *Ballál-Bárá* or Ballál's house, 800 cubits long, and 600 cubits broad ; a monstrous tank, one mile long, and a thousand cubits broad ; and two pillars of white marble, each 30 cubits high and 5 cubits in girth. Near these pillars, the writer informs us, there is a marble slab, 3 cubits long and a cubit and half broad, containing inscriptions in the Devanágari character, which the pundits of the neighbourhood cannot decipher, but which is believed to be of Ballál's time. Why does not the magistrate of the district send the slab to the Asiatic Society for decipherment ?

Mitrabiláp and other Poems. By Raja Krishna Mukhyopadhyay. Calcutta : Jadu Gopál Chatterjea & Co's Press. B. E. 1276.

MITRABILAP, or lamentation for a departed friend, is not altogether destitute of poetical beauties, the lines suggested on seeing the widow of the deceased being in our opinion the most pathetic of the whole series. The subjects of the 'other poems' are "The Sleeping Chamber of Yasodha," "the Declaration of Rádhá ;" "Sleep," "Time," "The Cry of Birds at Night," "Meditation," "The World," and "The Garden of Poesy." Some of the pieces are of considerable merit.

The Life of General Washington, in Bengali. In three volumes.

Vol. I. From the birth of Washington to the end of the battle of Saratoga. Calcutta : Day & Co's Press. 1869.

THIS translation, or rather compilation, does not call for any particular remark ; so far as we have seen, the language is intelligible. Amidst the voluminous trash which the Bengali press is vomiting forth, it is refreshing to find the memoirs of so great a patriot and statesman as George Washington. We trust the book will be popular. We do not understand, however, why the entire biography was not issued at once in a single volume. The volume before us comprises only 181 duodecimo pages and yet it has been priced at one rupee eight annas—a figure which must prevent a wide circulation. In the table of *corrigenda* there is reference to a "Preface," but we have been unable to find it ; we suppose it was omitted at the last moment, while the book was being carried through the press.

Rasaranjan Nátak. By Bihári Lál Sinha. Calcutta : N. L. Síl's Press. B. E. 1276.

THIS book should never have been published. It is decidedly immoral in its tendency. It contains the tale of a worthless young prince who falls in love with a silly princess whom he has never seen. A clandestine meeting of the lovers is concerted, and the *finale* may be conceived. Before reading the book we had supposed that the days of filthy trash had gone by ; but we were mistaken. The prurient performance is alike discreditable to the author and the publisher. Bihári Lal Sinha should better employ his pen than in poisoning the morals of his countrymen, and N. L. Síl, the publisher, should take care how he sinks in deeper degradation the *Batalá* Press, which has already acquired an infamous notoriety. An author, who by his writings corrupts the morals of his countrymen, is a public assassin, and ought to be held up to universal reprobation.

Rámáyana Mahákávya. Part I. *Adi Kánda*. By Haris Chandra Mitra. Dacca : Sulabha Press. 1869.

THIS is a translation into Bengali verse of the first book of the celebrated poem *Rámáyana*. As far as we have seen, the versification is good. But it is a pity that the translator has departed from the original poem of Válmíki. He has altered Válmíki with the assistance of later poets and critics. This, the

translator thinks, is an improvement. We think it is a disfigurement of the great poet,—a literary mutilation. A faithful, and, as far as possible, literal translation of Válmiki's *Rámáyana* into Bengali verse, would be a most valuable accession to vernacular literature. Babu Haris Chandra Mitra might have acquired immortal fame by rendering such an important service ; but he has missed the mark. Of the present revision we may say what Bentley said of Pope's translation of Homer : "It is a pretty poem, but you must not call it Válmiki's *Rámáyana*." But it is not yet too late. Let Babu Haris Chandra Mitra take our advice, and re-write the *Adi Kánda*, and go on with the remaining six *Kándas*, closely adhering to the text of Válmiki with religious fidelity.

Sparsánandá Nátak. By Kesav Chandra Sádhu. Calcutta : Stanhope Press. B. E. 1276.

THIS is the second drama we are noticing. It is not so bad as the last, but it is by no means unexceptionable in a moral point of view. Bení Mádhav, the son of Gyanendra, king of Lakshmipur, dreams one night that an exquisitely beautiful young lady comes to his bed and embraces him. The silly boy leaves his father's house, and sets out on his travels in search of the girl whom he had seen in the vision. In the course of his wandering he finds himself in the garden-house of Kálísankar, Raja of Sivapur, whose daughter Sparsanandá has also dreamt that a very handsome young man has come to her bed and embraced her. They meet and fall in love with each other. One night the girl leaves her bed while the maid-servants are asleep, goes to the young man in the garden-house, and marries herself to him after a fashion by an exchange of garlands of flowers. They are afterwards regularly married, when the parents of the girl become cognizant of the fact of their love. Such is the wretched story which our author has devised for the edification of his readers. It is superfluous to remark that publications like this do not only no good but an infinity of evil. They fill the mind of youth with unclean thoughts and filthy images.

Sambaran Bijay Kávya. Part I. By Praphulla Chandra Bandyopádhyáy. Calcutta : N. L. Sil's Press. B. E. 1276.

WE have noticed above an epic poem—we beg the author's pardon—a "great" epic poem ; and here is another, though

the present writer in his modesty, we suppose, does not apply to it the epithet "great." Whether the work ought to be called an epic or not we do not know, since only six *Sargas* or books are published, and the whole of the story is not before us. But though we are unable to tell whether it is an epic or not, thus much can be predicated of it without hesitation that it is no *poem* at all. We have not been able to discover in it a single spark of the divine fire of the poet. In its form it looks like a poem, but it is the mere form, without the soul, of poetry. And even as a form it is defective. The so-called poem is written in blank verse, but blank verse has not yet been naturalized in the soil of Bengali poetry. The specimens of Bengali blank verse that we have yet seen—those of Mr. M. M. S. Datta not excepted—are either dull prose printed like verse, or unintelligible nonsense. We do not say that the Bengali language will always be unsuited to blank verse; but we do say that it is unsuited *at present*, and it will remain so till some future Bhárat Chandra by sheer force of genius writes a divine poem in blank verse, and naturalizes it in Bengali poetry. Till then—and who knows when that time will come?—our Bengali poets, who appear to be as plentiful as blackberries, should write in rhyme.

Hindu Mahilá Náatak. A drama on Hindu females, their condition, and helplessness. By Batu Behari Bandyopádhyaý. Calcutta: G. P. Roy & Co. 1869.

THIS is the third drama on the list. As the book is printed at a respectable press and is well got up, and as it is dedicated to the Professor of Sanscrit in the Presidency College, Calcutta, we expected before reading it that it would contain no objectionable matter; but we have been disappointed. The Bengali dramatists seem to be all of a piece—they delight in describing moral filth. One of the principal characters in the play is Binod, who is entirely under petticoat government, and who, by his wife's persuasion, drives away from his house his mother, his sister, his brother, and his brother's wife. He at last finds his mistake when it is almost too late. Binod's wife, Bhagavati, is a woman of bad character. Kamal, perhaps the hero of the story, is a drunken reprobate, who, forsaking the company of his excellent wife, associates with loose women, one of whom deprives him of his reason by administering to him poison, and in a fit of insanity murders Ganesadeb, the paramour of Bhagavati, and

Dási her maid-servant, who acted as their go-between. Kamal's boon companions, Nabin, Chandra, and Madhab, spend most of their time in houses of ill-fame, where extravagant stories are told of their drinking powers. The best characters in the story are Syám, the brother of Binod, who is a lad still carrying on his studies in English; and Suramá, the wife of Kamal, who has received some education, and who is heart-broken at the drunkenness and insanity of her husband. The reader receives three impressions from reading this drama; *first*, that Bengali Babus are generally hen-pecked husbands; *secondly*, that they do not support their parents, and that the family system, which has existed in this country from before the days of Manu, is fast breaking up; and *thirdly*, that Young Bengal is a confirmed drunkard. We trust that these impressions are not correct, and do not represent the real state of things, and that the drama before us is not a picture, but a caricature of the rising generation.

Rámer Rájyábhishék. By Sasí Bhúshan Chattopádhyáy. Calcutta: Kávyá Prakás Press. Samvat 1926.

THIS is a popular account in prose of the classical story of Ráma, king of Ajodhyá. The bulk is taken from the *Rámáyana*, only the three first chapters being compiled from the *Víracharita* of Bhavabhúti and the *Anargha Rághava* of Murári Misra. As the legend of Ráma is well known, it is unnecessary to repeat it here for the thousandth time. The book is exceedingly well written, and the style excellent.

Ascharjya Manjarí. By Chintámani Bápuli. Calcutta: N. L. Síl's Press. B. E. 1276.

THIS pamphlet of 52 duodecimo pages contains a silly story of a Raja who was in the habit of sauntering about in his capital at night *incognito*. One night he observed a young man climbing, by means of a rope let down from the window, into the chamber of the daughter of his prime minister. The lover is seized, is declared to be without danger by heavenly voices, and is next morning rescued from before the Raja's judgment-seat by the young lady in the disguise of a knight. The style is execrable, being full of Sanscrit words for common things. The writer, like many of his countrymen, evidently thinks with M. Talleyrand that language is an instrument for

concealing thought. But it is as well that such a silly story is not intelligible to the common Bengali reader.

Pranay Parikhyá Natak. By Manmohan Basu. Calcutta : Stanhope Press. B. E. 1276.

THE cry is—"still they come." We have already noticed three dramas, and this is a fourth. We must acknowledge, however, that this is one of the best Bengali dramas we have ever read. Babu Manmohan Basu is favourably known as the author of the *Rámábhishhek Nátak*, and the present performance will no doubt add to his reputation. The chief objections to ordinary Bengali dramas are—their filthiness, the sensational character of the incidents described, and the utter want of dramatic skill in the writers. From all these faults the drama before us is exempt. But it is not only not bad, it is a really good play. A high moral tone characterizes it throughout; considerable skill is manifested in the evolution of the plot; and the several characters are well described and sustained to the last. The object of the writer is to describe the evil effects of polygamy. The story is this. *Sánta* Babu, zemindar of *Mángada*, had two wives, *Mahámáyá* and *Saralá*. The elder, *Mahámáyá*, though from her lips issued honied words, had a heart full of deadly poison, and looked with jealousy upon *Saralá*, who was the younger and handsomer of the two. Suspecting that she was less loved than her co-partner, she wished to test the affections of her husband. Through the agency of her maid-servant *Kájalá*, she obtained from a *Vediá* woman a vegetable essence which had the rare quality of locking up the senses of the man who swallowed it, of making him go to sleep to the woman he loved best, and further of inflicting on him a headache which usually lasted four days. This poison *Maírá-máyá* administered to her husband in a cup of milk. The looked for consequences followed. The unconscious husband got up from *Mahámáyá*'s apartment, and went to the room of *Saralá*. From that moment *Mahámáyá* resolved on ruining her rival, in which determination she was seconded by the craft and wickedness of *Kájala*, her maid-servant. As the health of *Sánta* Babu had been greatly affected by the good woman's experiment, he was told by his medical advisers to go to the *Monghyr* hills for change. He accordingly went to *Monghyr*, accompanied by his two wives and other relations. In the meantime, *Saralá* had become *enceinte*, and *Mahámáyá* caught hold of this circumstance to ruin

her. She secretly stole from Saralá's room a letter she had addressed to her husband, acquainting him with the fact of her pregnancy and the circumstances connected with it, tore up the envelope and enclosed the letter in another addressed to Sudhárám Babu, a most intimate friend of Sánta Babu, and put it in the way of her husband. When Sánta Babu read the letter, his indignation knew no bounds, and he determined to slay Saralá, who, he concluded, had been faithless. But Mahámáyá, in mock charity, told him to delay the execution of his intention till he saw with his own eyes Sudhárám going into Saralá's room. Kájalá had contrived a plan for the purpose. She had procured a person nearly resembling Sudhárám in features, had bribed him, and put on him clothes similar to those that Sudhárám usually wore, and had instructed him to go at night near the window of Saralá's room whistling as a lover; and she herself would personate Saralá, and let down from the window a ladder made of silk-strings to her supposed lover below. Accordingly, one dark night Sánta Babu, with sword in hand, and Mahámáyá, sat under a tree not far from the window of Saralá's room, awaiting the coming of Sudhárám. And sure enough, a man like Sudhárám approached the window whistling; a woman looking like Saralá (for Kájalá had put on Saralá's clothes) let down from the window a ladder; and some words of love were interchanged. Sánta Babu, mad with rage, rushed out from under the tree after the supposed Sudhárám, who fled; but he was checked in the pursuit by Mahámáyá. The infuriated husband then rushed, sword in hand, into the apartment of Saralá who had been asleep, abused her for her faithlessness, and was about to imbrue his hands in her blood, when he was again restrained by Mahámáyá. Saralá, conscious of her innocence, expressed her sorrow at the indignity offered her, and, in order to escape her husband's mad fury, left the room, and took shelter in a neighbouring thicket, where she was followed by her brother-in-law, Natabar. Next day a clue to the conspiracy was found by the disclosures made by the *Vediá* woman who had sold the drug to Mahámáyá and who was then accidentally in the neighbourhood; the experiment was again performed on Sánta Babu in order to convince him of the effect of the drug; and lastly Kájalá herself, when severely beaten, made a clean breast of the whole affair. Kájalá was dismissed from service; Mahámáyá was devoured by a tiger in the jungles whither she had fled, and Saralá, brought back safe from the woods, was reinstated in her husband's heart and hearth.

Some of the characters are very well drawn. Mahámáyá, true to her name, is full of illusion and mischief; Kájalá is a very imp of wickedness, though her light doom hardly satisfies poetical justice. Saralá is an excellent and lovely young lady, and Natabar, though at the commencement of the play somewhat repulsive, turns out afterwards to be a beautiful character. Altogether the *Pranay Paríksá* is one of the best dramas we have read for many a long day in the Bengali language.

Kavitávalí. Part IV. By the late Isvar Chandra Gupta. Calcutta : Prabhákar Press. 1869.

THE late Isvar Chandra Gupta, the projector and for many years editor of the daily Bengali newspaper, the *Prabhákar*, was perhaps the cleverest writer of the day. With no knowledge of the English language and little of Sanscrit, but endowed with natural abilities of a very high order, and an extraordinary sense of the ludicrous, he became, both in prose and verse, the most popular writer in Bengal. A selection of his writings from the daily newspaper and the monthly magazine which he edited, would be a most valuable and entertaining accession to Bengali literature. We never understood why such a selection was not published immediately after his death. Of this we are sure, that it would have had an extensive and rapid sale. But better late than never. We are truly glad that the undertaking has at last been commenced. A selection of the "able editor's" writings is now being published in parts; and the pamphlet before us, in 32 octavo pages, is the fourth of the series. It consists of short poems on a variety of subjects, all of them pervaded by a rich vein of genuine humour, the drollest and most entertaining being, in our opinion, "The Kidnapping Missionary." We wish the series were got up in a better and more attractive style.

Kavitá Kadamba. Part I. By Madan Mohan Mitra. Calcutta: Indian Mirror Press. 1869.

THIS is a poetical version of the remarkable sayings of some of the greatest men in the world, among whom we may mention the names of Sákya Sinha, Socrates, Nának Shah, Julius Cæsar, Napoleon, Muhammad, and Jesus Christ. We cannot say that there is any poetry in the compilation, but doubtless a good deal of moral instruction may be gleaned from it.

- 1.—*Sisu-Rangiká*. By Ambiká Charan Bandyopádhya. Dacca : Sulabha Press. 1869.
- 2.—*Sahoridaya-Ranjini*. Part I. By a Lover of Poetry. Dacca : Sulabha Press. 1869.
- 3.—*Padya-kumud*. By Guru Charan Dás. Dacca : Sulabha Press. 1869.

THERE must be something in the soil and atmosphere of Dacca peculiarly favourable to the growth of the poetic faculty. Here we have three poets, all making their first appearance in the town of Dacca, within the short period of four months. The poet, named first in the above list, made his *début* into the republic of letters on the 16th of April last ; the second on the 27th of the same month ; and the third on the 19th of August. Happy the city which is so fertile of poets, and thrice happy the people for whose benefit these sons of poesy sing ! As to the nature of the poetry which these gentlemen perpetrate, it is execrable to the last degree. There is neither rhyme nor reason within the covers of any one of the three books before us ; the characteristic of each being a rigmarole of wretched commonplaces, expressed in still more wretched verse. It is a positive infliction to read any one of these effusions ; but there is this consolation that the infliction is short-lived. The book first named in the list is 18 pages long ; the second, 12 ; and the third, 42. We observe that the first poet is a pupil of the Dacca Normal School, and the third, of the Dacca Pogose School. We would seriously suggest that the managers of these educational institutions should, with a view to the correction of these vainglorious youths, engage the services of Mr. Birch, and prevent them in future from having any intercourse with "Printers' Devils."



THE
CALCUTTA REVIEW.

No. 100.

ART. I.—A REVIEW OF THE PROGRESS OF SANI-
TATION IN INDIA.

No. II.

IN continuing our review of the progress of sanitation in India, we proceed to notice the subject of forest conservancy, a subject which has attracted considerable attention during the past decade in consequence of its supposed connection with the health of the people and for other causes.

Late in 1859, the Government of India directed the attention of the Lieutenant-Governor of the North-Western Provinces to the expediency of maintaining a supply of fuel, both for railway and general consumption, by planting. Dr. Oldham then stated the geological character of the country to be such as to hold out no prospect whatever of the discovery of coal within a reasonable distance of the great marts and towns of the North-West. After a lengthy correspondence it was decided,* that the necessity was not such as to justify the expense of making plantations along the course of the East Indian Railway, inasmuch as before the trees could grow up, coal would probably come into general use; so the matter dropped for the time. Since that period, however, under the auspices of succeeding authorities, various plantations have been formed in the North-West, of which the benefit will be reaped at some future period.

In 1863, Mr. Fisher addressed the Madras Government on the advisability of encouraging the growth of firewood on waste lands, representing the extensive devastations which had taken place, especially in the neighbourhood of hill-stations, and recommending the importation of the quick-growing Australian *Acacia* tree.

* Supplement to the *Calcutta Gazette* for 1860, p. 111.

In 1864, Dr. Anderson, remarking on the systematic destruction of forests near Darjeeling, stated that it had commenced with the introduction of various forms of agriculture. He asserts that there is not a single tea plantation in British Sikkim, on which the trees have not been completely felled. "They have ignored the fact, that for every pound of tea produced, one pound of firewood and two of charcoal would be required in the manufacture." They also must have lost sight of the well-known value of belts of forest as a means of protection from winds and storms of hail, so violent in those hills, of the effect thorough clearance exerts on the climate, and especially of the fact that water-courses dry up when exposed to a powerful sun through a long portion of their course. Dr. Anderson also states, that although there are no reliable records, the general belief obtains that the summers are now drier, the winter cold more severe, and that less rain falls, than formerly. It is also pointed out that wherever forests are felled, a class of weeds previously unknown invariably spring up so luxuriously, that no seedlings of the original trees can contend against them. Hence, when forest has been destroyed, it can never be replaced, unless man interferes to protect the seedling trees.

In consequence of these and various similar reports, a forest conservancy system has been established almost universally throughout British India. In 1865, a bill for the protection of forests was introduced into Council, and rules have since been framed for the conservancy of forests in Burmah, in the Central Provinces, in Coorg, in Sikkim, in Berar, in the Panjab, and elsewhere. In the Central Provinces, during Sir R. Temple's régime, free grants of land were offered, on the condition that the occupier planted 100 trees for every 10 acres. In a memorandum, dated 1866, on the first report of the Panjab Forest Conservancy Department, the Lieutenant-Governor remarks,—“The facts stated show, in His Honor's opinion, very decisively, how urgently the formation of this department was required to introduce correct principles of conservancy and cutting, and to preserve the forests of the Himalayas from the ruinous waste to which they have been subject.” And the same remarks would be equally applicable to any other part of India.

In addition to the forest conservancy of districts thus instituted, we find Government prepared in 1866 to sanction estimates for the planting of trees along roads in or near stations, as well as in clumps at halting places along main routes of traffic. *

* *Public Works Code*, chap. ix, sec. 13.

But in 1865, we find Mr. MacIvor * combating the generally received views, that the felling of forests (on the Nilgherries) causes any deterioration of climate, or has any effect on the fertility of the surrounding (Coimbatore) districts. He commences by remarking that the South-West monsoon rainfall is dependent on the temperature and elevation of the Nilgherries. The mountains generate, and are covered by, a cold stratum of air, which condenses the moisture contained in the warm atmosphere in its passage from the sea. Hence the lower the hills, the warmer the temperature and the less condensation and rain ; and *vice versa*. Trees, however, he admits, increase the cold stratum of air, by offering a larger evaporating surface, and in this way aid in more effectually relieving the clouds of their moisture. But Mr. MacIvor argues that the more rain abstracted from the clouds in their passage over the mountains, the less there must be in the districts over which they next pass. He also remarks that trees evaporate from every leaf, to an extent more than 80 times the amount of the surface of ground they cover, and thus expend the moisture they are supposed to retain. They draw the water from the streams, which, thus intercepted, is dissipated never to return, instead of flowing on to fertilize the lowlands. It is asserted that convincing proofs may be met with in the Nilgherries, that streams arising in and flowing through valleys destitute of trees, maintain their flow better than those passing through wooded valleys. Therefore Mr. MacIvor concludes that if the Nilgherries were quite destitute of trees, the streams would carry to the low country a flow of water twice as great as they do at present !

It may be admitted that the chief cause of rain on mountain ranges is the condensation produced by the warm moist air coming in contact with the colder hills, and by the decrease of density consequent on elevation. Under such circumstances, whether the mountain slopes are bare or clothed with forest, rain would fall, neither condition having any appreciable influence on the precipitation. But even allowing this much, it is easily demonstrated that where no forests exist, the earth becomes parched and dry and eventually unfit for cultivation ; and this especially in hilly regions. Tropical forest in such positions may indeed be

* Report on Cinchona cultivation for 1863-64. Mr. MacIvor's remarks may be regarded as an extraordinary example of special pleading. They are generally supposed to be an answer to complaints that the destruction of forest consequent on Cinchona planting influenced the rainfall.

considered the *alma mater* of springs and streams. As the rain descends on natural forest, it is conveyed in various directions by the leaves, and on reaching the ground is prevented from running rapidly off by underwood, herbaceous plants, and dead leaves. It thus gradually percolates, aided in movement by the roots, to the subsoil, and eventually becomes the subterranean supply of springs.

The gravitation downwards on the hill sides is also retarded by the interlacement of root fibres, and shade again modifies evaporation; all tending to the retention of the water in the earth. But in the absence of forests on the hill sides, although the average rainfall may occur, the water rushes off immediately. No impediments to its downward course existing, it soon finds its way to the plains, and in many localities is totally lost in the neighbouring sea. Thus springs and rivers, formerly perennial, will, on the gradual destruction of forest on the hills from which they flow, only retain water for a short period after the monsoon; and the districts through which they run will suffer from drought. No water being in the streams, percolation into wells is less copious, until eventually, in numerous instances, the supply ceases altogether. It is this gradual process, which has in various parts of the world reduced the fertility of the land, and converted smiling fields into comparatively barren wastes. Moreover the presence of trees is attended by other results, which cannot be without their effects on climate. The temperature of the air in forests, and in clearing, differs as much as two degrees; hence the absence of trees must favour heat. The evaporation constantly going on from the leaves must tend to maintain the air moist, while the shade afforded and the attraction exerted on moisture by the roots must prevent dryness of the earth. Lastly, the absence of trees, probably influences the composition of the air, if, as is generally believed, the leaves not only give off oxygen, but also absorb and destroy noxious gasses or malaria.

Further, as the *experimentum crucis*, we have in various parts of the world, lamentable instances of the evil results following the destruction of forests. Thus M. Huc tells us that towards the middle of the 17th century, the Chinese entering Western Tartary found the Mongols tending their herds in forest steppes. The new comers commenced grubbing up the trees to make room for their cultivation, and

under their system of forest destruction, the country gradually became the arid region subject to periodical droughts which it now is.

And we have a similar result occurring in Western India. The great district comprising Western Rajputana, Bhawalpur and portions of the Panjab, presents traces of a population, and of ruined towns and villages, now unknown. Away in the desert, even in Marwar—'the Land of Death'—may still be seen decaying cities, demonstrating that at some remote period of Hindu history the country was comparatively densely populated, and must have been cultivated to a greater extent than now. There is indeed every reason to believe that the desert-like appearance of this part of India is due to the gradual destruction of the forest which at one period covered the face of the land. The daily consumption throughout ages of tons of fire-wood has at length effectually denuded the country of vegetation. And a result of this is that the rainfall has diminished, and the lighter alluvial portions of soil have been blown away, and not being replaced by decaying vegetation, the heavy sandy particles only remain, constituting the extending desert of to-day. When we recollect that the population of India is many millions, and that each individual requires at least one pound of fuel *per diem* for cooking purposes, the consumption of wood in this manner alone will be appreciated. Even if we make allowance for the common use of *dung* as fuel, the consumption of fire-wood must nevertheless be enormous.

In Coorg also, the effects of forest destruction have been brought to the notice of the Supreme Government by Mr. Bowring and Dr. Bidie.* Did space admit, accounts from numerous localities—as Palestine, Mauritius, Ceylon, America—might be quoted, evidencing the diminution of rainfall following the destruction of forests.

It is impossible to note all the places at which the rainfall is now registered in India. We shall content ourselves with drawing attention to the result of such registration in the Mahableswar ranges—a result which illustrates the enormous difference of the rainfall in closely neighbouring localities in India. The Western Ghâts take a south-easterly direction, are all trap, with the flanks very jungly. At one station, 14 miles from the edge of the ghâts, the fall was 51 inches ;

* *Gazette of India*, Supplement, 1868.

23 miles away, only 11 inches. At other stations, from 190 inches to 21 inches, within a range of 20 miles. At the third line of stations, 60 inches to 55 inches, the intervening distance being 21 miles. At a fourth station, Malcolm Path, 252 inches fell; 11 miles away, 207 inches; 15 miles more inland, 170; 6 miles more, only 74 inches. In all the lines of stations it was found that the fall rapidly decreased in proportion to the distance from the summit of the ghâts; but that local formations influenced the fall also. Dr. Cook, who collated the returns, further remarks that from the rain register kept at Mahableswar for the last 30 years a very remarkable phenomenon becomes apparent. This is an alternate excess and deficit every five years,—an item of knowledge which may be of moment, in connection with irrigation schemes from the rivers *Krishna*, *Yenna*, and *Quina*, rising in these hills.

In compliance with Circular No. 1076 of 1863, from the P. I. G., Medical Department, Bombay, ozone registrations, kept at various civil and military hospitals, were forwarded to Dr. Cook, then Superintendent of Mahableswar, for compilation and report. From the registrations at fifteen different stations, conclusions were drawn regarding, 1st,—The general presence or absence of ozone at each station during the year; 2ndly,—The connection between the meteorological and geographical conditions registered, and the evolution of ozone; 3rdly,—The presence or absence of ozone in connection with the prevalence of cholera, diarrhoea, dysentery and fevers. Referring to the first question, it was found that the mean daily average of ozone was from 7·5 at Tanna to 1·1 at Rajkot. But the registrations cannot be regarded as trustworthy records of the amount of ozone prevailing in the atmosphere generally, some of them being conducted in hospitals and cities, where ozone is always found to be deficient. Moreover, a single annual return cannot be considered conclusive of the character of any particular place, with regard to the amount of ozone. On the second point, Dr. Cook states that the greater prevalence of ozone was very marked during south or south-westerly winds, and *vice versa*. Therefore ozone must be present in greater quantities in the rainy season. But very excessive moisture, again, appears to arrest its development. At Mahableswar, where 250 inches of rain fell in four months, ozone is at the lowest development during such months. The force of the

winds also affect the ozone registrations, more being present in proportion to the velocity with which the wind travels. As regards geographical position, the seashore and elevated localities enjoy the largest amount. On the third head—the development of ozone in connection with the prevalence of certain diseases—Dr. Cook arrives at the conclusion that, although it does not always follow as a logical sequence that cholera ensues as an epidemic on the absence of ozone, yet there is a decided connection between the absence or marked decrease of ozone and the presence of cholera. With regard to the prevalence of other diseases, the connection is not so marked. But the only practical deduction drawn from the above, is contained in Dr. Cook's 49th para., which runs as follows:—

“In the third section of the report of the Bengal Cholera Commission, it is laid down that on the outbreak of cholera in an epidemic form at any station, the troops are to be immediately removed to camps formed for the purpose, at some distance from cantonments. If the cases are simply sporadic, they are not to be so removed. The decision of this frequently weighty and difficult question rests with the principal medical officer on the spot. I cannot but think that under circumstances like these, a knowledge of the condition of the atmosphere, as regards the excess or deficiency of ozone, would prove of very great assistance to him in forming his diagnosis. When ozone is shown to be deficient from the atmosphere, the fact would justifiably warrant a greater amount of precaution being taken, and a stricter application of the rules of sanitary science being enforced.”

The above somewhat meagre conclusions, regarding the influence and action of ozone, are in strange contrast to the enthusiastic predictions following the discovery and first registrations of this agent. Schönbein, while making experiments on the decomposition of water by electricity, first discovered ozone in 1839. Scoutellen of Metz published a treatise on the subject in 1856, after which Dr. Moffat and others took up the subject in England. “Ozone,” wrote Schönbein, * “is the most powerful oxidizing agent we yet know of. It destroys instantaneously sulphuretted, seleniuretted, phosphoretted, ioduretted, arsiniuretted, and stibiuretted hydrogen.” He further stated ozone

* *Med. Chir. Trans.*, vol. xxxiv, p. 205.

to be one of the chemical antipodes and antidotes to all oxidable, miasmatic, and malarious gases and emanations. Moffat and Scoutellen* joined Schönbein in the declaration that ozone is indispensably necessary to the due accomplishment of all the vital functions, and to the relief and modification of disorder and disease. Dr. Pickford† remarks,—“In confined places “where ozone cannot penetrate, plants and men become “blanched, the skin grows pallid, the blood loses colour, lymph “predominates, all the tissues soften, and serious disease of “the adynamic type breaks forth.” Pneumonia, bronchitis, influenza, and other maladies particularly affecting the respiratory passages, have been attributed to excess or diminution of ozone. The agent has also been supposed to exert destructive influence over malaria, and hence on malarious disease. A recent writer,‡ after stating that swamps and marshes near the sea are nearly always free from malaria (an assertion entirely opposed to experience§) explains this presumed exemption by the presence of ozone formed on the ocean in greater quantities. M. Kosman of Strasburg, and Dr. Ireland in India, pursuing Hirsch’s hint that trees exhale both oxygen and ozone, declared broad-leaved trees to be the most useful in this respect; and the planting of trees on the esplanade in Bombay for the special object of generating ozone was definitely proposed.|| Dr. Cook¶ believes that under peculiar circumstances ozone is capable of being concentrated in the atmosphere, and in this form becomes the active agent of the terrible simoom of the deserts of Arabia and Africa.

But even when the influence of ozone was most credited, sceptics were not wanting. Some chemists** have even doubted whether any proof has yet been given of the existence of ozone in the atmosphere. *Nitrous acid*, frequently present, will colour the iodide of potassium of the ozone paper in the same manner as ozone itself.†† Moreover, other observers have declared that the substance giving the ozone reaction, is not

* Pickford on Hygiene, p. 69.

† Pickford Op. Cit.

‡ *Madras Medical Journal*, vol. x.

§ An inquiry into the truth of opinions regarding malaria, by Dr. Moore. *Indian Annals Med. Sci.*, vol. xx.

|| *Times of India*, June 22, 1863.

¶ Report on the registration of Ozone. *Gazette of India*, p. 261.

** Frankland and Cloez quoted by Parkes, *Practical Hygiene*.

†† Cloez, quoted by Parkes, *Practical Hygiene*.

deficient in marshy districts, and that when ozone is conducted through marsh dew, organic matter is not destroyed. Burdel* found as much ozone in the air over marshes as in any other place. Parkes† does not see any evidence of weight proving that deficiency in ozone has assisted the spread of epidemics, or that excess has checked them. And most unbiased minds, after attentively noting what has been recorded on the subject, must arrive at a similar conclusion. The registration of ozone and its connection with disease, however, deserves more general attention than has been yet accorded to the subject.

The value and importance of irrigation in India cannot be better illustrated than by recent returns made by the Irrigation Department of the North-West Provinces. The increase of cultivation for the year 1868-69 in the canal districts of Hindustan, must have tended very greatly to supply the loss of grain caused during that season by want of rain. The area irrigated was just 89 per cent larger than that of the preceding year, and 95 per cent more than the extent of land irrigated during the famine of 1861. Throughout the districts irrigated by the North-West canals, the rainfall of 1868-69 averaged from one-half to one-third less than the usual quantity, but the increase of cultivation was nearly double. As the Lieutenant-Governor justly observed, "it would be hardly possible to overrate the blessings conferred on these provinces by the irrigation of over a million and four hundred thousand acres, the greater part of which would otherwise have failed to produce any harvest."

But unfortunately there is seldom unmixed good from the most laudable of human operations. And it is found that irrigation, as now practised, is attended with special drawbacks. Ten years since an epidemic of fatal fever ravaged various parts of the Allyghur district, on which Dr. Farquhar reported that he found the malady prevailing more especially along the banks of nullahs used as escapement channels for the surplus waters of the Ganges Canal. Taking a cross direction, Dr. Farquhar found that at a distance of four or five miles evidence of malarious disease began to be apparent in the enlarged spleens of the population, while, as he approached nearer the focus, the

* Burdel, *Recherches sur des fièvres.*

† Parkes, *Practical Hygiene*, p. 440.

malady became intensified to such an extent as to cause death in a few hours. And this frequently recurring malarious condition of the ground appears to be intimately connected with the formation on the surface of that peculiar efflorescence denominated *reh*. Many parts of the country, especially in the immediate neighbourhood of irrigation canals and tanks, are covered with this substance, which, it must be recollected, is entirely different to the incrustations of saltpetre so often also met with. *Reh*, according to analysis conducted in England, is found to contain about 23 parts of soda, with seventeen of sulphuric acid, in alliance with smaller proportions of potash, lime, magnesia, carbonic acid, and silica. The substance is frequently used for washing purposes, and is found useful in the removal of grease stains, ink spots, &c. It is also employed in the manufacture of an inferior kind of soap. But these uses do not at all compensate for the destructive qualities of *reh*. Wherever it appears, seeds imperfectly germinate or decay in the ground. Even grass will not grow where *reh* forms, land which for years has been highly cultivated becoming perfectly barren and unproductive, and, as is the case with all ground so deteriorated, highly malarious and unhealthy.

It is now some years since attention was forced to the subject, and still the origin and prevention of *reh* remain unsolved problems. The late Colonel Baird Smith was of opinion that the evil was caused by the canals being higher than the surrounding country. The water percolating through the soil to seek its own level, was supposed to carry with it various salts from the soil, which deposited themselves on the surface of the ground with the evaporation of the water. On the other hand, *reh* was said to exist in the water and not in the soil, and in some instances, as in the Ravee water, this has been found to be the case. But the weight of evidence points to the land as the seat of origin of these *reh* salts, which, in addition to their injurious effect on the public health, cause annually a considerable loss to the revenue of many thousands of rupees, from rendering the ground unproductive.

Another evil attending irrigation, and also closely allied to the deposition of *reh*, is the saturation of the country with water, and the consequent raising of all the spring levels. By constant irrigation from rivers, and the consequent cessation of draught from wells, the soil below the surface becomes saturated. As demonstrating the increased moisture of the soil, it is

stated, that in the Mozuffurnuggur district certain land which before the construction of the canals grew wheat, now only grows rice, and former rice lands now produce bulrushes. And any tract of country in such a condition cannot but prove malarious. As a consequence of this prevailing state of saturated ground, we are told by Dr. Cutcliff that in addition to various forms of fever, a physical degeneration of a most important nature is going on among the inhabitants. It is a matter of general complaint in certain irrigated parts of the Doab and Meerut division, that the number of births is decreasing, and, as has occurred in other parts of the world under malarious influences, the race must die out and the country become a jungle, unless some alteration be practicable. The people, it is stated, are everywhere impressed with the idea that their unnatural condition has been brought on by the effect of the canals, "which spoiled their drinking water by the deposit of "*reh*" in the wells, impaired their appetite and digestion, and "destroyed their virility."

Now if it be a fact that the extension of irrigation is thus attended with evils such as we have described—with fatal malarious fevers, or the less rapid but not less certain degeneration alluded to—the impracticability of thus 'developing the country' must be sooner or later admitted. Even irrigation schemes must give way to the all-powerful influences of malaria. But it has not yet been fully proved that the increase of malaria must result from irrigation. It is the *abuse* and not the *use* of water from which *reh* and malaria arise. It is over-irrigation and the absence of drainage which produce the evil. The useless deluging of acres of land with more water than is requisite for the growth of the crops, may certainly be authoritatively stopped. But the combination of irrigation and drainage is a more difficult matter. It is an important problem which engineers are called upon to solve. And if no other remedy is possible, except by deepening the canals, so that the water must be raised to flow over the adjoining country and may drain back, such a method must be pursued, instead of carrying the water above the surrounding land; and this, whatever may be the attendant expense. Otherwise, malaria will not leave any people to use the canals.

Very few subjects have received more attentive sanitary legislation than emigration; and this particularly during the

past decennial period. In 1860, we find the emigration of native labourers authorized to Natal, to St. Kitts and to certain French colonies, and emigrant ships were required to be supplied with Normandy's water distilling apparatus, so that five gallons per week for each person might be ensured. In 1861, emigration was extended from Mauritius to the colonial dependency of Seychelles. In 1862, the bill providing for emigration to the French colonies was amended, provision being made for the suspension of the Act, should at any time proper measures not be taken for the protection of the emigrants at their destination. In 1861-62, no less than 31 emigrant ships left Calcutta and Madras, conveying away 19,880 emigrants, with a mortality of 8·54 per cent. It was found that in ships carrying neither Normandy's apparatus nor surgeons, the death ratio from 1855 to 1862 reached 7·07 per cent; in ships carrying the distilling apparatus 5·60, and in vessels provided with both apparatus and medical aid only 3·36 per cent. In 1863, an Act repealing all others was passed, and contracts for labour were rendered unlawful, except to British colonies and French possessions. Emigration agents, a Protector and a Medical Inspector of Emigrants were appointed, remunerated by fixed salaries; depôts were established, licenses issued to emigrant ships, scales of provisioning laid down, rules regarding space issued, and measures adopted for surveying vessels before a voyage. The good effect of these regulations was exemplified in the report of the voyage of the *Alnwick Castle* to Trinidad, resulting in the alteration of one regulation, by which the length of time emigrants are kept on deck is now decided by the medical officer in charge. In 1863, a bill was also passed, authorizing emigration to the Danish Colony of St. Croix, and regulations were laid down regarding the transport of native labourers to Assam, Cachar and Sylhet. In 1864, emigration was permitted to Queensland. In 1865, rules relating to emigrants from the Port of Calcutta were issued by the Governor-General, under section 63 of the Emigration Act. This code is very full, and provides for every sanitary requirement, both on the voyage and while in depôt, to the most minute detail. Similar rules were shortly afterwards applied to the Ports of Madras and Bombay. In 1867, an addition to the diet scale of four sheep for every 100 emigrants proceeding to the West Indies was ordered. In 1868, crystallized carbolic acid was substituted for all other disinfecting agents on board emigrant ships.

It thus appears from the above brief detail, that everything possible is ordered in India, and on Indian emigrant ships, for the health and safety of Indian emigrants. And the small amount of mortality which now occurs amongst these classes demonstrates that sanitation has here again been successful. But it is much to be feared, that on arrival at their destination Indian coolies are exposed to other influences. During the past few years, the epidemic fever which has ravaged the Mauritius, has found its most numerous victims in the emigrant population.* It is computed that 10 per cent. of the male emigrants died in six months, the mortality of the women and children being scarcely obtainable.† And the causes leading to this fever are thus noted by Surgeon-Major Small :—1st.—The large amount of forest land recently cleared for fuel and sugar cultivation. 2nd.—The immense increase in the number of inhabitants by immigration from India. 3rd.—The close aggregation into villages of an immense number of Indians, who, their term of engagement being complete, are under no sanitary surveillance. 4th.—The diminished amount of rainfall during the past few years.

Although, so far as we know, no other colony to which Indian coolies are despatched is now devastated by epidemic fever, there can be no doubt that emigrants landed at many of the places mentioned in the schedule, are practically placed in a climate and under circumstances entirely foreign to all former experience, and hence, almost as a matter of course, mortality must occur among these people in an increased ratio. In 1868, the Secretary of State drew attention to the death-rate among Indian coolies in British Guiana, which on some estates exceeded 5 per cent.‡ Of St. Vincent coolies it is remarked that, although their health is good, their earnings are unavoidably small from causes chiefly physical.§ And so on might be quoted from various reports on the subject. It therefore seems more than probable, that the Indian cooly does not much better his circumstances by leaving his native land. Following the example of the recruiting sergeant, when pressing the shilling on an unwilling clodpole, or emulating the conduct of American sellers of lots “down east,” there can be no doubt that Indian emigration agents picture an *El Dorado* to the unfortunate victims

* Army, Medical, Statistical and Sanitary Report, 1868, p. 445.

† Supplement, *Gazette of India*, 1868, p. 644

‡ Ditto „ p. 397

§ Ditto „ p. 694

whom they desire to entrap. No person on earth is more credulous than the native of India, when one of his own race is the deceiver. When, however, he arrives at the Mauritius, or wherever else he may be bound, he finds out the mistake he has made. So long as he is in *depôt*, at the port of embarkation, or under Indian rules and regulations on board ship, he finds his wants and even comforts studied. But once landed on the sugar planter's estate, instead of the *dolce far niente* anticipated, he finds himself under a contract to work for those who, even if not rivaling Shylock, insist on a fair day's work for a fair day's wages—a return which Indian coolies are not always anxious to render. Of course every man has a right to carry his labour to the most remunerative market, even to the uttermost ends of the earth. But it may be questioned, whether by emigrating the Indian cooly does this. It is doubtful if his condition would not be better, if he remained in India. It is true he is supposed to be a free agent, but he is *persuaded* into exerting his freedom by misrepresentations. And the increased demand for labour in India renders it at least questionable, whether encouragement to emigration should be accorded by the legislature. It was but some short time since the Madras Government addressed the Secretary of State on the desirability of introducing mechanical means to supply the *want* of labour, and also recorded the intention of introducing into all schools a system of instruction in the theory of mechanics, and of offering prizes for the invention of machines suitable to the wants of the country. And the same difficulty in procuring labour, felt in Madras, has extended to other districts, particularly in the Western Presidency. Within the last ten years, cooly hire has indeed doubled itself in most parts of the country. All departments employing native labour cry out about the difficulty of procuring a sufficiency. And the public works, now in progress or proposed, barracks, irrigation, railways, must for many years to come increase the want. But even were not this the case, there is in India plenty of space for every Indian. The idea that India is an over-populated country is not correct. Excepting perhaps the delta of the Ganges, the country is under-populated. Thousands of square miles await occupation and cultivation, a result which, if achieved, would tend towards the prevention of famines, and the attendant or subsequent disease. Without interdicting emigration, policy appears to forbid its encouragement, while on the other hand, it

would appear desirable to afford some inducement to persons willing to try their fortune in the less populated portions of Hindustan.

The conclusions and proposals of the International Sanitary Commission of Constantinople, which, as previously mentioned, are not altogether unquestionable, have nevertheless resulted in considerable action. Judging from the proceedings of the last two years, we may perhaps now fear over-legislation on the subject of quarantine. Regulations which are most useful when enforced with judgment and moderation, may be, and indeed have been, made utterly obstructive to both commerce and travel. Some years back when quarantine was more practised in the Mediterranean than at present the loss thus entailed was estimated to amount to three millions sterling. The trials which travellers have undergone, owing to a vexatious system of quarantine, have often been made the subject of complaint in the public press.

By regulations of the Turkish Government dated 1865, vessels bound to Bussorah, on arrival at the *Shat-el-Arab*, are to communicate with the sanitary officer at Fao, who will give a certificate of health to enable the vessel to pass up the 50 miles of river between the head of the Persian Gulf and the town first named. Now, being acquainted with Bussorah and the other localities mentioned, we feel perfectly sure that disease, whether plague or cholera, is much more likely to be conveyed from Turkish Arabia towards India than in the reverse direction. Vessels passing to Bussorah would proceed from Bombay, from Muscat, from Abushire, or other places in the Persian Gulf, not one of which was some years back so filthy, or so likely to become the seat of epidemic disease, as Bussorah with its date grove swamps, and foul canal leading to the *Shat-el-Arab*. In fact, the true plague did really appear in Turkish Arabia in 1867, in the Hindieh district, but appears to have been stamped out by energetic sanitary measures.

Again, under regulations of the Porte, it was ordered in 1866 that vessels from India should be inspected and perform quarantine at Jeddah, if necessary, before proceeding towards Suez. And in 1867, Turkish regulations against cholera, were forwarded by the Secretary of State to India, entailing a ten days' quarantine and purification of personal possessions; the quarantine, however, becoming less after so many days at sea, until but 24

hours is required after 20 days' sail. Of course these rules only applied to vessels arriving at Turkish ports from infected places. But in the absence of a bill of health it was decided that vessels from any place should perform quarantine, although passengers might be passed by quarantine trains across the Isthmus of Suez.

In 1868, a Sanitary Commission for the Red Sea was appointed by the Turkish Government, the members of which, five in number, were to be stationed at the different ports during the Hedjaz.

As a consequence of these latter arrangements, we have reports vitally affecting the subjects of Her Majesty in British India, who perform pilgrimage to the holy places of the Red Sea. We well recollect in 1865 a Haji, who with twenty-five followers made the pilgrimage to Mecca, telling us on his return that twelve died either on ship-board or in the streets of Mecca. And this among the followers of a man, able and willing to afford them every necessary of life. But it is to be hoped that recent regulations will effectually prevent the recurrence of any such mortality. A letter from Dr. Dickson, forwarded to the Government of India in 1868, gives an account of recent sanitary improvements in that most unhealthy of cities, Mecca. Proper latrines had been constructed, the streets had been watered, the sewage conveyed away underground into receptacles half an hour's distance beyond the outskirts of the city, and slaughter houses removed from the town. But, it was added, "the poor people still linger in the streets, until proper shelter can be provided." At Jedda also, the sanitary conditions appear to have been greatly improved. Swamps formerly surrounding the town had been partly filled up; bazars and streets had been widened, and covered in as a protection against the sun; fresh water had been made abundant, and a lazaretto with a medical officer attached opened for the pilgrims. The Hedjaz of 1869 passed off with merely nominal deaths among the assembled pilgrims. It is not therefore too much to attribute this satisfactory result to the sanitary measures noted.

The importance of a good understanding with regard to the nomenclature of disease adopted by various nations, no less than the importance of a carefully devised quarantine system, was well demonstrated at the commencement of the year 1869. The steamer *Pearl* arrived at Jeddah from Bombay, with a health certificate mentioning that deaths from cholera had

occurred in the latter city. The *Pearl* was therefore subjected to quarantine, and alarm was excited at Constantinople by exaggerated reports of sickness at Jeddah. But the cholera mentioned in the *Pearl's* certificate referred not to *epidemic* or Asiatic cholera, but to those *sporadic* cases of the malady so often presented in all oriental, or indeed often in English, towns. It was therefore suggested that the ordinary mortality rates of Indian cities for some years past should be furnished to the Turkish authorities, from which they might judge if the number of cases reported in any vessel's certificate, as prevailing at the period of sailing, were above the average. A more clearly worded or detailed certificate would, however, appear to be the better remedy.

There is ample evidence that a limit exists beyond which sanitation cannot be neglected without the result of one form or other of epidemic disease. During the decennial period under review, various parts of India have been devastated by a peculiar typhoid malarial fever—the direct result of the circumstances under which the population affected exists. It is scarcely thirty years since the malady as above explained culminated in ‘mahamurree,’ a malady very similar to the true plague, and which, originating in Guzerat, spread under the name of ‘Pali Plague’ even to the snowy range.* It also re-appeared in the south of Rajputana in 1855, and again in Kutch in 1860. Under the influence of sanitary measures energetically enforced, the first epidemic of ‘Pali Plague’ was eventually overcome. The two last subsided spontaneously, or probably the malady relapsed into that malarial typhoid fever, perhaps less suddenly fatal and therefore less alarming than the so called plague, although scarcely less disastrous in its effects. Happily during the past ten years, with the exception of a slight re-appearance of *mahamurree* or plague among the Wagheers of Kutch in 1860, the country has been free from

* A history of the Pali Plague may be found in vol. i. *Bombay Medical and Physical Society*. Also see *Indian Annals of Medical Science*, 1854. It will be apparent from the text that we regard the malady described as Pali Plague or *mahamurree* as identical with malarial typhoid fever (not using the term typhoid as signifying intestinal fever). Pali Plague appears the more severe manifestation of the malady, as the climax arising from the neglect of sanitary principles. The descriptions recorded of *mhamurree* are not those of true plague or *pestis*, from which it differs in being frequently complicated with marked lung disease.

what may be regarded as the fully developed scourge. But, as will presently be shown, the epidemic fevers which have occurred in various districts almost forbid from their destructive results congratulation on the absence of plague. The following districts have, during the past decennial, period, been more than ordinarily subject to epidemic typhoid malarial fever;—the Allygurh Pergunnahs, reported on by Dr. Farquhar in 1859; the Hooghly, Nuddea and Baraset districts, reported upon by Dr. Elliot in 1862; North Canara, reported on by Dr. Leith in 1863; Northern Guzerat, reported on by Dr. Martin in 1865; Southern Rajputana in 1863, not made the subject of public official report: the Rohilcund division, reported upon by Drs. Stewart and Haines in 1862-63; the Meerut division by Dr. Cutcliff in 1868; and the Hooghly districts, again reported on by Dr. Smith in 1869.

Regarding the Allygurh Pergunnahs, Dr. Farquhar * stated that he found the malady prevailing along the banks of ditches used as escapements for the surplus water of the Ganges Canal. Taking a cross direction it was found that at a distance of four or five miles, evidence of disease began to be apparent in the enlarged spleens of the population, while as the focus was approached, the malady became intensified to such an extent as to cause death in a few hours. Dr. Farquhar thus described what he witnessed:—"One or two deserted villages were passed through, and several on the outskirts of the inundation were visited. These latter had suffered from fever to a comparatively small extent. Another large village further up was entirely deserted except by a dog or two, the nature of whose food could be readily imagined from the gnawed human bones, that had been dragged from a shallow tank close to the village. The living had been unable to bury or burn their dead, and had thrown them into the water to cover them from sight!"

Dr. Elliot's report † on the Hooghly districts disclosed, if possible, a still worse condition. From the investigations made by Dr. Elliot, it would appear that since 1824 epidemic fever has periodically broken out in the Jessore, Baraset and Hooghly districts. When inspected in 1863, the majority of the villages in the above districts were affected. During the previ-

* On Canal Irrigation. Read before the Punjab Agri-Horticultural Society.

† Supplement to the *Calcutta Gazette* for 1863, p. 156 *et seq.*

ous autumn, 20 per cent. of the population had died, leaving four-fifths of the remainder suffering from obstinate intermittent fever of the tertian or quartan type, from enlargement of the spleen or liver, from dysentery, diarrhœa, dyspepsia, or general anasarca. The villages are described as consisting "principally of scattered groups of huts, connected by belts of trees, and mango and bamboo topes, the whole being surrounded by a dense and impenetrable jungle. In the centre, and round each clustre of huts, excavations have been made, and from the earth thus obtained the huts have been constructed. These holes, more or less extensive, become filled with water during the rains, which is allowed to stagnate during the rest of the year. They are used promiscuously for drinking, bathing and washing, and the filthier they are, the greater the attraction to them seems to be. To those who have not actually seen it, it is almost impossible to imagine the denseness of the jungle, or the number and filthiness of the tanks; wherever the latter have been most numerous, there the most fatal effects of the epidemic have been most marked."

The causes of this Hooghly fever, were therefore reported to be as follows:—1. The bad sites of the villages, standing on the banks of stagnant rivers, or located near jheels or marshes. 2. The nature of the soil being always alluvial. 3. Want of cultivation of the land, on which every kind of vegetation grows and decays unchecked, and where various animal substances accumulate, decompose and putrefy under the action of heat and moisture. 4. Position and overcrowding of houses. 5. Excess of vegetation and bamboo cultivation in the immediate vicinity of the dwellings. 6. Bad water, and the condition of the tanks. 7. Absence of all attempts at drainage. 8. Position of Musalman graveyards and Hindu burning ghats in the immediate vicinity of houses. In the burning ghats carcasses half burnt in all stages of decay were common! 9. Bad food. 10. Scanty clothing. 11. Neglect of Conservancy. 12. The custom of sleeping on the damp ground. 13. Fear.

The measures recommended for the prevention of the disease were,—1. The removal of superabundant vegetation, and thereby the admission of light and ventilation. 2. The best tanks to be re-dug, cleaned, and others to be filled in. 3. All holes and excavations to be filled. 4. Drinking-water tanks to be separated from those used for bathing, &c. 5. Drains to be constructed and maintained clean. 6. Foul streets to be cleansed, paved and kept in

proper condition. 7. Burning ghats and burial grounds to be kept in good order. 8. Surrounding jungle to be cut down and cultivation encouraged.

These remedies were described by the Lieutenant-Governor as "simple and obvious," and with only "ordinary co-operation on the part of the zemindars and the inhabitants themselves in giving them effect," the probability of the return of the fever was regarded as remote. "It seemed to His Honor, that after the serious lessons they had now had, the mere instinct of self-preservation would, with proper and judicious aid and encouragement, compel the survivors to recognize the inevitable effects which must result, if they persisted in fostering all the conditions which have, from time to time and in all countries, been proved to be the most powerful predisposing causes of disease." The Lieutenant-Governor further stated* that he could not in common fairness expend money from the general revenues of the State in remedying the condition to which the people of a particular part of the country had reduced themselves by apathy and neglect. But he would co-operate in any organized system of sanitary relief. Accordingly the somewhat extraordinary step was taken of calling upon the British Indian Association for aid. At the same time the magistrates of the different districts were addressed, and an engineer officer, Lieutenant Hills, was deputed to the locality.

It soon became evident, however, that during the short time, which remained before the monsoon, the Augean task of cleansing the whole of the affected district would be impracticable. It was therefore determined to confine all efforts to a few of the largest and most fever-stricken villages. Matters were explained to the inhabitants; the advantages that would result from the adoption of the proposed measures were pointed out, and a subscription list to supplement the Government grant was opened. Sums varying from Rs. 200 to Rs. 3000 were promised in weekly instalments, the first of which only was paid, "after which the subscriptions ceased, and hence the impossibility of entertaining any large working establishment." It happened unfortunately that Mr. Maclean, the Magistrate who was charged with personal supervision over the works, became affected by the prevailing fever, and the fact appears to have been seized upon by the natives as an excuse for withholding their promised contributions. The indifference

* Supplement to the *Calcutta Gazette* for 1863, p. 173.

exhibited by the inhabitants was most distressing. "I have spoken to them," wrote Mr. Schalch, "and urged the necessity of their immediately undertaking sanitary measures, but my appeal has met with no response, and I am convinced that not only shall we obtain no voluntary assistance, but that to procure the necessary labour, we must import coolies from other districts." "I very much fear," wrote Mr. Hills, "nothing will be done except by coercion, as the villagers have displayed much apathy to their own welfare, and in some cases have offered resistance to measures solely adopted for their own benefit, and in fact have done all in their power to retard the progress of the works; the richer and more influential natives having proved the most troublesome, trying by every means in their power to incite the rest of the inhabitants to refrain from adopting, or allowing the measures to be carried out." Notwithstanding this opposition, nineteen large villages were made comparatively clean, were partially drained, had their tanks cleaned, and much of the surrounding jungle removed. The reduction of sickness was very marked. According to the computation of the natives themselves, the mortality was reduced 40 per cent.

But even these spasmodic efforts at sanitation do not appear to have been continued. We have from time to time since 1863 heard of the recurrence of mortal fever in the Hooghly, Baraset and Nuddea districts, although no official record of its progress appears.

At length in 1869, the natives themselves, like the cartman calling on Jupiter, submitted a memorial to the Bengal Government. The mortuary returns of 181 villages were attached to the memorial, and it was stated that in the village of Dwarbasini, mentioned as an example, out of a population of 2,700 souls 1,900 had perished during the last five years, and that among 820 living men there were not two hundred able-bodied. The picture drawn by the natives was a sufficiently gloomy one; but the testimony of Dr. Smith, the recently appointed Sanitary Commissioner for Bengal, fully confirms the statements which the memorial contained.

Dr. Smith denies that the fever is epidemic, and regrets that the term should ever have been applied to it, as it has induced a belief that as soon as the shock has passed away, everything would return to its normal condition, whereas as an *endemic* malady it is ever present among the people. The causes of the

disease are to be found, according to Dr. Smith, in the defective state of the surface drainage, caused by the physical changes constantly occurring in an alluvial district, the gradual silting up of tanks and streams, and the filthy habits of the people themselves. Every revolting abomination now, as when Elliot reported, is to be met with in these villages, and the connection between the atmosphere thus polluted and the sickness and cachexia of the people cannot be questioned.

Although it may perhaps be doubted if neglected local sanitation is *altogether* the cause of the sickness prevailing in these districts, it is still admissible to express a hope that mere temporizing with the evil will not be allowed. Sanitary history abundantly demonstrates that without some authoritative machinery even common cleanliness will not be attended to. And this not only among the comparatively ignorant and apathetic natives of this country, but even in European communities. Knowing this to be the case, we feel sure that nothing but authoritative interference will avail to remove existing preventible causes of disease in mofussil India. Both policy and humanity forbid that authority should remain passive, while our ignorant and misguided fellow subjects are destroyed in thousands by preventible disease. The sinews of the country are thus strained and snapped, villages are depopulated, and the land becomes a desert. The fact that Indian village life has from the days of their Aryan forefathers been pretty much what it is now, is no argument in its favour. It is indeed quite the reverse. Centuries of neglected sanitation have left their indelible marks on the natives of India. It has been the fashion to attribute their peculiar attributes, the proverbial apathy, *finesse* and faithfulness of the Hindus, especially to the food they eat.* But at least as much of the peculiar *mizaj* which characterizes so many of the natives of this country, arises from the deteriorating influence of the air they breathe, and the water they drink.

We have no hesitation in asserting that no one under a civilized Government, whether native or European, whether resident in a military cantonment, a civil station or a native town or village, should be permitted to endanger the public health by inattention to the ordinary rules of sanitation. And if no legislative Act at present suffices to bring authority to bear on

* *Vide Mill's Political Economy*, vol. i.

both individuals and communities, we venture the opinion that executive machinery adequate to the purpose should be immediately devised, and put in operation throughout the country.

Immediately after the report on the condition of the Hooghly districts, we have in 1863 Dr. Leith's report on North Canara.* From this document it appears that since 1860 epidemic fever had assumed a more severe type, being spread over the whole zillah, except at some few places on the sea-coast. It was calculated that 27 per cent. of the population were affected. In the official resolution † on the subject, it was recorded that the information which had reached Government relative to the extensive prevalence of an epidemic fever differing from the ordinary fever of the district, had not in any respects been exaggerated; indeed, "the statements of Dr. Leith show that the evil is far more serious and difficult of cure than was first supposed." Medical aid and medicines having been furnished, the attention of local authorities was called to the remedial measures pointed out.

Amongst other defects the condition of the drinking water was particularly commented upon. Mr. Campbell, the Superintendent of Police in North Canara, thus describes the supply: "When one remembers that this tank-water washes down from the fields a great proportion of the ordure, the remains of dead animals, and every conceivable filth that accumulates in the environs of a village, and that shallow and unrenewed it remains stagnant and reeking under a tropical sun, it does not seem strange that the people who have no other drink should become ill. We visited one of these tanks; we saw the people going into the water, and before filling their vessels, washing their legs and feet in the very water they were going to drink. We took some of the water out in a tumbler, and found it of a yellow colour, and so thick that we could not see through it."

In order to render the water drinkable, Mr. Campbell recommended that each village should be supplied with filters, composed of double baskets, with a layer of charcoal between the outer and inner basket.‡ Dr. Ross, who examined the water before and after this filtration, stated that the cleansed water was pleasant to the taste, clear, and sparkling, and contained no trace

* Supplement to the *Calcutta Gazette* for 1863, p. 294.

† Dated 30th May 1863.

‡ Filters on the same principle might be more durably constructed of perforated zinc, iron or wood, or even of stone masonry.

of organic matter under the microscope. The unfiltered sample contained a large percentage of organic matter, and numerous animalculæ of the *protozoic* variety.

Yet even this simple, inexpensive and well-tested remedy does not appear to have been adopted. The Magistrate forwarded Mr. Campbell's communication, accompanied by the expression of a wish that the latter would "succeed in improving" these simple contrivances for removing the presence of the "horrible beasts," meaning the animalculæ, which, he somewhat sarcastically adds, "have been so eloquently described by "the learned civil surgeon." Mr. Campbell very properly replied that if the subject seemed worthy of attention, it was for the Collector's department to follow it up. Lastly, on the whole matter being referred to Government, Collectors and Engineers were requested to *report* what means, having regard to economy and efficiency, they would recommend for filtering tank-water.

Another simple method of obtaining comparatively pure water from tanks was recommended by the Principal Inspector-General of the Bombay Medical Department. This consisted in digging holes near the margin of tanks, into which comparatively clean water filtered. There is however no record of authoritative interference in order to carry out these requirements, although the Collector, Mr. Shaw Stewart, reported that "a good deal of land had been "thrown up in consequence of death and illness."*

In the cold season of 1863-64, the southern part of Rajputana, especially Serohee and various portions of Marwar, was afflicted with severe fever. During the two previous monsoons, more than double the ordinary amount of rain fell. On Mount Aboo 123 and 98 inches were measured, against an average of 69 inches. At Soudpoor in Marwar, where the fall rarely exceeds 12 inches, the unwonted spectacle of floods occurred, far exceeding anything of the kind "within the memory of the oldest inhabitant." During the ensuing cold weather a typhoid malarious remittent form of fever was very prevalent, from which large numbers died. The inhabitants staggered about their villages like drunken men, haggard and emaciated, more or less jaundice being a frequent complication. And the condition of the villages in these districts, with the exception of being less surrounded by jungle, is in every respect as destitute of sanitation as those in North Canara, or on the banks of the

* *Gazette of India*, April 9th, 1854.

Hooghly. At many places tank-water only is procurable, and this often brackish. Women not only fill their *gharas* from the same water they wash in, but also from the same water the cattle drink from and bathe in, and often within a few yards of a micturating buffalo!

In 1864* a report was published regarding epidemic fever in Rohilkund. Dr. Stewart described this malady as similar in its nature to the continued fevers of Europe, with a crisis on the eighth day, a strong tendency to head affections, and death by debility as in typhus, the only *post-mortem* appearances being congestion of the brain. Dr. Haines described the malady as a low remittent, with tendency to complication with liver affection, as exhibited by the jaundiced tint which most of the cures assumed after the lapse of a few days. Dr. Corbyn stated his opinion, that the fever, at first endemic, afterwards became infectious. Here also the general want of sanitation, the impurity of the drinking water, and the filthy habits of the people are commented upon, and referred to as the exciting causes of the epidemic.

In 1865 the outbreak of a malady said to resemble the Pali Plague was reported in the northern districts of Guzerat, and in the independent principalities of Palunpur and Radunpur. Dr. Martine, of the Bombay Service, who was despatched to investigate this disease, reported the malady not to be plague, but a severe form of typhoid malarious fever.

Early in 1868, owing to the prevalence of fever in the Meerut Division, Dr. Cutcliff was deputed to investigate the subject. The burden of Dr. Cutcliff's song was the old tale,—defective sanitation, want of efficient drainage, and filth everywhere. The most important portion of Dr. Cutcliff's report, relating to the peculiar physical degeneration of the people, has been already noticed in our remarks upon irrigation.

At the close of 1863 the Government of Bombay directed the attention in administrative officers in the civil department to the sanitary improvement of cities and towns; and the reports thus elicited were placed at the disposal of the Sanitary Commission on the first establishment of that body. It then became apparent that the existing law rather impeded that expedited the progress of sanitary reform. One great hindrance was stated to be the want of jurisdiction by the subordinate

* *North-Western Provinces' Gazette*, August 9th, 1864.

magistrates in cases of nuisance. The chief authority of the Kandeish district mentioned that in 1862 one of the *mamlutdars* committed for approval 181 persons fined for offences punishable under Section 19 of Regulation XII of 1857. But in the following year the same *mamlutdar* committed only six cases, feeling that in the generality of instances it was a hardship both to witnesses and accused to send them to the Collector's camp, which might be often 100 miles distant. Evils, it is said, obvious even to a native eye, were allowed to remain unnoticed, when punishment could not be inflicted without a journey for all parties to a distance of perhaps 50 or 60 or 80 miles. It was therefore suggested that further powers should be given to subordinate magistrates of towns and villages.

In 1869* the Government of the North-Western Provinces issued sanitary regulations drawn up for the benefit of the people by the Sanitary Commissioner, Dr. Planck. In simple language the object in view is stated to be the improvement of the air and water which the public breathe and drink, to be accomplished by the removal and burial of impurities, by filling in holes, by maintaining the cleanliness of streets and keeping them paved, by the removal of manure heaps, by avoiding overcrowding, by thinning and planting trees on certain principles, by keeping the best well for drinking purposes, and by protecting it by a parapet, and by keeping the ground round the wells especially pure and clean.

Although in this sketch of the epidemic fever which has prevailed in various parts of India during the past ten years the urgent necessity of enforcing sanitary regulations has been dwelt upon, we are altogether of opinion that something more is required than the term 'sanitary regulations' generally implies. Although epidemics of fever have occurred in localities like Rajputana, Guzerat, North Canara, where such works as railway embankments, irrigation canals, and raised metalled roads are unknown, still it is none the less a fact, that fever has been more persistent and destructive in all those localities to which we are accustomed to point as presenting triumphs of European administration. However humiliating this reflection may be, the fact is undoubted, and to ignore it is to perpetuate the evil. If we ignore it, the natives certainly do not. They ask

* Supplement to the *Gazette of India* for 1869, p. 122.

if the boasted improvements of the English have not resulted in physical, if not moral, deterioration of the people in those localities where the most magnificent works exist. They assert that the raised metalled roads, the railway embankments passing for hundreds of miles through a flat country, have interfered with the natural drainage; that the canals have saturated the subsoil and produced an atmosphere damp, malarious and unhealthy. They complain that we have assigned too much importance to jungle, to rank vegetation, and want of conservancy in their towns and villages, and, lastly, they adduce the argument that the few sanitary regulations enforced have not been followed by any certain and favourable result.

But the truth—the cause of the fever—is neither altogether due to the neglect of sanitation nor to the operation of our public works, but to *both*; and in certain localities to other influences over which we have even less control. The fever prevailing may be best described as of a mixed type—*typho-malarial*, and it appears probable that the typhoid condition is dependent on the want of sanitation generally apparent, the basis of the fever (if we may use such an expression) being malarious. There has indeed been much contradictory opinion expressed with regard to the exact nature of Indian mofussil fever, and with good reason. For according as malarious influences or typhoid influences mostly prevailed, so the type of fever assumed more nearly true malarious, or true typhoid, conditions. It is indeed probable that both varieties of fever really co-exist, marking and confounding characteristic symptoms. We cannot indeed altogether attribute Indian mofussil fever either to defective sanitation or to the influence of public works on the drainage of the country. Both conditions produce their peculiar fever, and these, combined or co-existent, decimate the inhabitants.

But, as before remarked, there is still in some localities another cause over which we have even less control, and this is the silting up of rivers in the delta of the Ganges and other places. It is authoritatively stated* that the deposits brought down by the Ganges and its tributaries on their way towards the sea, are gradually filling up large low-lying tracts of country and river channels, which must remain for a considerable time

* Letter to the Secretary of State by Deputy-Inspector-General Sutherland, June 1869.

in the condition of a malaria-producing swamp. The causes producing such results have doubtless been in operation for an indefinite period, but it is only latterly that their continuous action has resulted in that climax capable of exciting endemic disease. As the rivers silt up, the annual inundations of the rainy season extend. The river bed becoming more and more shallow, the area over which the flood water spreads must be greater, and therefore more water stagnates on the surface of the country.

Dr. Sutherland, Deputy Inspector-General of Hospitals in Bengal, has recently addressed a most able letter to the Secretary of State, in which the influence of this natural silting of rivers, and the action of raised road and railway embankments as impeding drainage, are credited with the whole onus of inducing Indian mofussil fever. While not agreeing in the opinion that this Indian fever is altogether malarious, we are convinced that in many localities malaria plays the most important part. As in other places, deficient sanitation is the chief agent, and for this reason Dr. Sutherland's recommendations seem to demand immediate attention. Wherever roads have been carried through a district, great care should be taken to find if they have not acted as artificial drains, and held back water seeking a lower level: culverts should be constructed in all such cases. Along the line of railway, it cannot be doubted that a greater number of such passages for the free flow of water is urgently required; the destruction of railway bridges in Bengal prove that this matter was not sufficiently attended to. "In estimating the effect of obstructed drainage in causing endemic fever in Lower Bengal, it should be recollected that the whole district is formed of sedimentary deposit; everywhere in the delta of the Ganges the superficial surface soil (generally about 10 feet in depth) over-lies a bed of clay which is nearly impermeable to water." Dr. McClelland, in his *Topography of Bengal* states that "without the surface soil Lower Bengal would be a swamp, without the underlying clay it would be a desert."

But Dr. Sutherland confesses that even if railway embankments and raised roads are effectually prevented from becoming impediments to natural drainage, there must still remain much swampy and ill-drained land. In order to avoid this evil, the novel proposal is made, that tanks should be dug in all swampy, damp localities. This is in direct opposition to the recommen-

dations of Dr. Elliot in 1860, who advised the filling in of many existing tanks. But the fact is, tanks and ponds, like many other things, have both their use and abuse. If permitted to remain in a filthy condition, and if used for all purposes, washing, drinking, watering cattle, if sewage finds its way into them, if they become overgrown with aquatic vegetation, if the surrounding surface degenerates into swamp, there is no doubt that tanks must prove injurious. But collections of ordinarily clean water are not deleterious, and there is evidence to show that even a stagnant lake may be maintained pure and sweet by a suitable proportion of animal and vegetable life in the water. And if thus maintained sweet by preventing pollution and by aquatic herbs and fish, tanks must prove beneficial. The country for some distance round is drained into the tank, and therefore the saturated state of the surface soil is relieved. If it be objected that digging tanks in marshy land is too expensive for general adoption, it may be remarked that the value of the land so reclaimed would in many localities, especially near large towns, be so enhanced as to pay a considerable portion of the cost. It is stated that various places, such as Burdwan and Kishnagur, have become more healthy, since tanks were excavated in the neighbourhood.

The Government of India propose a very much more extended system of railway communication, as well as an indefinite increase of irrigation works. But unless sanitary principles as well as profit are consulted in the triumphs of civilization proposed, both railways and irrigation canals, especially the last, may prove 'perilous gifts.' By rendering the country artificially malarious, we condemn the inhabitants to early death, and render their progeny weak, feeble and incapable;—conditions which the neglect of sanitation alone would certainly not render *permanent*, although disease would as surely be produced therefrom. Such injury can only be avoided by preventing the artificial draining of water by road and railway embankments, and in irrigated districts by preventing the subsoil from being permanently saturated with water. The first requisite is simply a question of money, the building of a sufficient number of culverts. The problem of effecting canal irrigation without undue saturation of the soil is, as mentioned in our remarks on irrigation, a problem for the engineers to solve. As now carried on, irrigation involves a canal of water above the level of the surrounding surface, the deleterious effect of which has already been noticed.

It also involves the waste of water, and the stagnation of such waste on the surface of the ground. We require a system of irrigation, which will afford sufficient water and no more than is required to grow the crops. Every gallon in excess is deleterious to health, yet we frequently hear of waste of water by the natives, of fields unnecessarily deluged. There certainly should be no insurmountable difficulty in combining sufficient irrigation with sufficient drainage. Unless some means of doing so be devised, irrigation will eventually prove a curse rather than a blessing. It will certainly prevent the people from suffering from famine,—not by giving them abundance of grain, but by killing them off by disease.

We may be mistaken in the idea, but it appears to us that sufficient importance is not attached to the necessity of good drainage, either by the civil authorities or by the engineering department. The latter look only to the appearance and stability of their work, and ignore swampy spots as a cause of disease, which to the sanitary mind suggest malarious maladies, from the marked intermittent to the rapid remittent, from the general malaise to the most advanced cachexia. But we may preach of the etiology of disease without the desired result, until the time comes when we are no more heard, unless one somewhat unlikely occurrence takes place; and that is a course of instruction in the causes of disease and sanitation generally, in all the schools and colleges in the land.

Few matters of recent legislation have effected more towards the improvement of the public health in the large towns of India than the institution of Municipal Commissions, including in the term Sanitary Boards. Without referring to the utility of these bodies in laying the foundation in this country of self-government, they are immediately and especially beneficial in improving the sanitary condition of the localities in which they exist. Of course such institutions do not progress without opposition, misrepresentation, cavil, and internal quarrel. either, perhaps, is it well they should do so. An 'opposition' is the safeguard of all gubernatorial or public bodies, and the remarks, reflections and strictures, one sees in the public prints on municipal commissions are, if not particularly, at least generally, the best signs of progress. During the ten years under review, commencing with the presidency cities, municipalities have been instituted in most of the important

towns of British India where a mixed population of Europeans and natives reside. Many of these commissions commenced as Sanitary Boards, afterwards expanding into municipalities. The latter, however, cannot yet be regarded as generally 'free and enlightened,' although in time they will doubtless become so. Government still reserves the right of appointing certain officers *ex officio* as Presidents or Members. This, however, can only obtain for a time, and the more interest native gentlemen show in the matter, the sooner will local government be altogether in their hands.

It would serve no good purpose to give a list of the dates on which municipalities were formed in different localities. It will suffice to remark that while special bills have been passed for the presidential cities, mofussil towns have been provided for by an Act passed in 1863, for the appointment of municipal commissions, and for making better provision for the conservancy, improvement and watching of towns and cities, and for the levying of rates and taxes. With regard to the beneficial results already effected, one instance may suffice. In Mr. Crawford's annual report of the Bombay municipality for the year 1868, the gradual reduction of mortality under energetic sanitation is thus shown :—

1864, 25,015 persons died, or one in every 32 of the population.

1865, 28,631	do.	do.	28	do.
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1866, 16,865	do.	do.	48	do.
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1867, 15,500	do.	do.	52	do.
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1868, 15,702	do.	do.	52	do.
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The system of vaccination has been considerably extended and improved within the decade, particularly in Bengal Proper. Up to the year 1827, the work of vaccination was entrusted to Civil Surgeons. The first grand advance was made in Bombay in that year, when four European superintendents were appointed in that Presidency. It was not, however, until some years afterwards that the example was followed in other provinces. In 1854 superintendents were appointed in the North-West. In 1863 the Panjab Vaccination Department was placed on its present footing. Vaccination under European superintendence was introduced into the Central Provinces in 1864, and into Oudh in 1867. In 1865 vaccination under Civil Surgeons was declared a failure in Madras, and a more sufficient establishment under European superintendents formed. But in some parts of Bengal the old

system still prevails, although the Darjeeling Vaccine Circle was formed in that province in 1866-67, and the Ranchi and smaller Circle of Sonthal Pergunnahs (under a sub-assistant Surgeon) in 1867-68. In the native states of Rajputana and Central India, vaccination is inefficiently carried on by a few vaccinators attached to the dispensaries, the introduction of vaccination in many of the states dating within the last ten years. It should also be mentioned that the three presidency towns are supplied with vaccinators under European superintendence, Calcutta being supervised by Dr. Charles, who has recently recommended a vaccine circle as a 'shield' round that city.

Chiefly in consequence of the exertions of the officer just mentioned, inoculation has been prohibited by law in Calcutta since 1865, and in the villages in the neighbourhood of Calcutta and in several large stations in Bengal since 1866. By a still more recent bill inoculation has also been prohibited in Gurhwal and Kumaon. Practically, however, in the latter hill districts, inoculation had been prevented under the Penal Code for some years previously, but this procedure having at length been found 'not lawful,' an Act of the Supreme Council became necessary. When under consideration, Mr. Strachey remarked that he could state from personal experience, that 15 years ago no part of India suffered more severely from small-pox than Gurhwal. He never heard of epidemics of cholera or plague more fatal. But since the introduction of vaccination, small-pox had almost ceased. The people were protected to an extent almost unsurpassed.

It has been objected, and Dr. Charles, we are sorry to see, has given the weight of his authority to the objection, that unless vaccination can be completely substituted for inoculation, the latter should be permitted as a preservative means better than none at all. We take this opportunity of emphatically protesting against this view of the matter. Nothing tends more to disseminate small-pox than inoculation. And when this operation is performed, no one can positively prophesy the results. The disease thus originated may be mild or the reverse, and in any case becomes a fresh centre of infection. We are fully aware, that it is impossible, without undue expenditure, to make vaccination universal through paid vaccinators. We fully agree with Dr. Pearson, that "all that can be done under ordinary means, and such as the finances will admit of, is "merely like a shower to the ocean." But inoculation being

altogether prohibited, those pursuing this avocation would *ex necessitate* turn their attention to vaccination, and so numbers would thus be protected by the prophylaxis, who now undergo inoculation. There is a wide difference between the enforcement of any surgical operation, even although one so harmless as vaccination, calculated to prevent disease, and the suppression of a surgical operation, which like inoculation, we know, disseminates a most loathsome malady. The arguments against the former cannot be used in favour of the latter. Neither is the preservative action of inoculation worthy of the slightest attention. Without inoculation, even if vaccination were less practised, the amount of small-pox in the country would be diminished; whereas persons inoculated convey the malady from place to place, and each becomes a fresh centre of infection.

In addition to the actual mortality caused by small-pox, the after results on the eyes, limbs, skin and constitution generally, are sufficient to stamp the malady as one of the most fatal now retarding progress in this country. As Macaulay compared plague and small-pox, as they occurred in England in times gone by, so cholera and small-pox may be now compared in India. "The track of the plague had been more rapid, but the plague visited our shores only once or twice within living memory, but the small-pox was always present, filling the churchyard with corpses, leaving on those whose lives it spared the hideous traces of its power, turning the babe into a changeling at which the mother shuddered, and making the eyes and cheeks of the betrothed maiden objects of horror to her lover." Yet, in spite of such ravages, in spite of the fact that small-pox slays more people in India, either directly or indirectly, than perhaps any other three diseases, in spite of the facts that in all countries where vaccination has been systematically carried on—the United Kingdom, France, Sweden, Westphalia, Bohemia—small-pox has become a comparatively harmless and unfrequent visitor, in spite of the declaration of one of the greatest of living authorities, Sir J. V. Simpson, that small-pox might be altogether 'stamped out' by sanitary measures, in spite of the fact that it has been so temporarily stamped out in many localities in this country,—in spite of all this, there is hesitation in preventing inoculation, and a committee of the Bombay Association recently deputed to consider the subject of compulsory vaccination, ignoring the fact that it has been found necessary

in more civilized countries, reported that the expected benefits were not sufficient to justify any such law! The only possible excuse is that the members of the said committee were not well acquainted with either the ravages of small-pox or the powers of vaccination. They cannot, however, be now excused on any such grounds, Dr. Lumsdaine, the Health Officer of Bombay, having addressed a most exhaustive essay on vaccination to the Association.

The system of vaccination now generally adopted in India, is the close inspection by special European superintendents of work done by native subordinates. The establishments of vaccinators are spread over a considerable extent of country, and the European officer follows the vaccinators, verifying by actual inspection the returns they make. Hence, as a general rule, the vaccination is good,—perhaps often better than that performed at so much per head by parish vaccinators in England. Much of the success of vaccination, of its power as a prophylaxis, depends upon the care with which the operation is performed. The idea that any one will do for a vaccinator is altogether erroneous. The better educated the person is, the better vaccinator he will make. In 1864 the Government in a review of vaccine operations, remarked that the reported failure of certain native deputy-superintendents, might be attributed to the fact that they were all sub-assistant Surgeons, “a class of men who would naturally prefer practising the professions to which they had been trained, and who are too highly educated for the less interesting and mechanical duties of superintending vaccine operations.” But all knowing any thing practically about vaccination, must respectfully differ from the above. Both a vaccinator and a superintendent should at least be able to judge regarding the freedom of both children vaccinated, and those from whom lymph is taken, from either *latent* or patent disease. There are maladies only discernible to the educated eye which should forbid vaccine operations at least temporarily. And the operation itself requires a certain amount of manual dexterity only to be acquired by practice. Vaccination is, indeed, an *important* and not a *trivial* operation, and if it always could be performed by qualified medical men, the results would be more satisfactory. It was probably this feeling of the insignificance of the vaccinator's business, which led to Superintendents of vaccination being classed as second class civil appointments, with salary

attached of less value than the medical charge of a native Corps. But a protest forwarded by the Principal Inspector General of Bombay led to an alteration of this financial rule.

Formerly much antipathy to vaccination existed, but this is in many districts in British India fast giving way. The people have become accustomed to the operation, which is now divested of its terrors, and moreover the utility of the procedure has been often directly proved. But in the native states, much antipathy still exists. And this may be accounted for by the small agency employed, an agency totally inadequate to produce any decided and appreciable results. In only one native state in Rajputana, namely Bhurtpur, is there any adequate system of vaccination. In that principality, however, Dr. Harvey, the Superintendent, states that the results of the last epidemic of small-pox in 1869 were diametrically opposed to the epidemic of 1861. During the earlier period the people shunned vaccination, during the later they courted it. The interval having been made use of in spreading the preventive means, the people could appreciate its value. Some idea of the difficulties attending the spread of vaccination in the native states may be gained by the following quotation.* “The population of Marwar firmly believe Variola to be under the control of the goddess *Mata*, in whose honour temples abound, and fairs are even held. Near Joudpoor, is a space of ground filled with trees, and called *Kagli ka Bagh*, and containing the *Setla Devi* temple. In the month of March a *Mela* (fair) is here held in honour of *Mata*, and thousands of women and children attend with offerings for the goddess. The declivities of most of the numerous conical hills present either a reddened stone, or temple devoted to *Mata*, with most probably an attendant Brahmin priest. Nearly every village has its goddess of small-pox in the immediate locality, and in many places a large piece of ground is esteemed holy and called *Mata ka Than*. The people do not pray to escape the affection, unless in seasons when it occurs with more than ordinary violence. They do, however, petition for a mild visitation. But even the loss of an eye does not appear to be viewed as a very serious calamity. Is there not the other eye sufficient for all purposes? questioned a philosopher. If it

* Marwar, the Land of Death; by Dr. Moore. *Indian Annals of Medical Science*, vol. xx.

"were the leg or hand, it would be different, but an eye is immaterial! The pitting produced by small-pox is by some considered rather an addition to beauty than otherwise, as black patches on the face were among English belles of former days. Moreover others imagine an attack of small-pox not proving fatal demonstrates the favour of the goddess on the fortunate individual. As will be supposed among such a people, the establishment of vaccination is no easy matter."

In order to spread information regarding the prophylaxis, a vernacular history of its origin and progress has been extensively circulated throughout Rajputana, both in Persian and Hindi. In the Bombay Presidency a pamphlet on the same subject by Dr. Plumtree has been printed in Guzeratti. Dr. Shortt also followed a similar course in Madras. In 1863 Superintendents were requested by the Principal Inspector General at Bombay to make known, with a view to publication in the vernacular, any facts demonstrating the protective power of vaccination.

Dr. Shortt also contributed some valuable information regarding vaccination from the heifer, giving an interesting account of the experiments. Vaccination from the cow was also tried by Dr. Pearson, and by Dr. Burr at Jeypoor. At the present time, the subject has been taken up by Dr. Blanc in England.

The subject of the preservation of vaccine lymph has also received considerable attention. During the last ten years, the use of the glass capillary tubes has become very general. Dr. Charles recommends keeping the sealed lymph in porous earthen gharas of water. Dr. Harvey has experimented with lymph diluted with glycerine, but found it did not retain its power during the hot season, although the plan of so diluting fresh lymph, when scarce, and large numbers require vaccinating should be borne in mind. Dr. Harvey has also experimented with crusts kept in glycerine during a hot season, but with no degree of success. Lymph on points enveloped in goldbeater's skin and then sealed in tubes, has also been recommended.

In conclusion we take the opportunity of adding our testimony to the purity and power of the lymph supplied by Dr. Pearson from the Kumaon hill depôt. It generally succeeds, and without it it would be difficult to carry on vaccination after the hot season in many localities in the Indian plains.

Although, so far as we are aware, *Trichinia* have never yet been detected in India, there is no manner of doubt that the animal food consumed in this country is frequently the seat of other varieties of parasites. And there is every reason to believe, that this is often a cause of disease among the meat-eating inhabitants of the country—especially among Europeans. It is not generally known that cattle and sheep when hungry, are very unclean feeders. During that period of the year in India when the monsoon rain produces abundance of grass, sheep and cattle will from preference feed on their natural means of sustenance. But it is far otherwise at other seasons. No sooner with the cessation of the rains does the country begin to assume the dry appearance of the cold weather, to be followed by the arid bare aspect of the hot months, than the cattle eagerly devour not only grass, but every particle of foreign substance, provided it be soft, which they happen to meet with. And when the habits of the natives are recollected—that in all localities not immediately under European supervision there are no such things as latrines, that the ordure of the population of villages and cities is deposited on the surface of the ground, or in the neighbouring ravines and hollows, the amount of filth presented to the cattle and sheep going to and returning from their pasture may be better imagined than described. And cattle in India are not as in Europe confined in fields at night. They are driven from the village in the morning to graze on the waste lands in the locality, and at night are herded back again to the fold outside the walls, hedges, or other limits of the village. And twice a day they pass over the cloaca of the population! Pigs are not one whit more dirty feeders than Indian cattle and sheep. The former will consume ordure, old clothing, rotting bones, or even putrid flesh, with the greatest avidity. And in making this assertion we simply remark what we have seen a hundred times. During the recent famine year, the cattle being more hungry than usual owing to the failure of grass, we have many times been obliged to witness sights which are too disgusting to be described in these pages. And this occurs every year, though perhaps to a less extent.

Now if it be true, as it most certainly is, that the *ova* of certain parasites are contained in the alvine discharges of those afflicted with the mature form, and that they may pass through their mature development in the bodies of animals, it is easy to imagine the amount of latent disease which must thus be

promulgated. The hydatid cyst derived from the larvæ contained in human ordure, grows in the flesh of the cattle and sheep used for human food, is consumed by the meat-eater, and although the vitality of the great majority is destroyed by cooking, many germinate into the tapeworm so prevalent in this country. And the number of pariah dogs and pigs infesting every Indian village cannot but add to the danger. Kuchenmeister, Leuckart, Humbert, and Cobbold have with certainty traced the origin of some forms of *entozoa* to dogs and pigs, the ordure of which are devoured with equal zest by our supposed grass-eating herbivorous animals ! The fact of the Muhammadans—the flesh-eating natives of India—being especially more prone to tapeworm than the Hindus, is conclusive that their troublesome malady is introduced into the system through the medium of butcher's meat.

There are no means of ascertaining with exactness the amount of diseased meat supplied by contractors to European soldiers in India, but for one station at least a return is forthcoming. Dr. Fleming * states that at Mean Meer in 1868, 2,651 cattle were slaughtered for the use of the troops, and of this number 235 were found "cyst" infected, and condemned as unfit for food, the percentage being 8.86. The average price was Rs. 8-8 per head, showing a loss to Government of Rs. 3,944 or £394. And this amount of prevailing cattle disease may probably represent the ratio in many other parts of India, although attention to the subject may not have brought it to light. But a large quantity of butcher's meat is also supplied to others than soldiers, to officers, private families, and natives. It is only reasonable to presume that where Government with a special Commissariat corps fails in supplying healthy meat to the soldier, private purchasers do not fare better. Thus the full account of the injuries silently inflicted on the unlucky flesh consumers of India scarcely appears on the surface.

As Dr. Fleming very truly observes, tapeworms are not pleasant companions, and produce symptoms often of a serious nature. Upwards of a hundred cases are recorded, both in our own country and on the Continent, where the *scolex* condition of the tapeworm has infested the human body, and caused death by epileptic seizures consequent on the development of the hydatid in the brain or other vital organ. The importance of the subject therefore

* *Indian Medical Gazette*, June 1869.

is unquestioned, and a practical lesson should be taken from the condition of the inhabitants of Abyssinia and Iceland, the former of whom, according to Blanc, are all subjects of tapeworm, the latter, by Dr. Hyfennessu's account, being almost as badly circumstanced—the condition of both doubtless caused by defective conservancy.

The sanitary measures required for the prevention of the spread of *hydatid* or tapeworm disease, may be readily named. A system of latrines should be established in every village, and the inhabitants prevented from depositing their ordure in the direct track of the herds going to and returning from their pasture grounds. An examination should also take place in all cyst-infected districts, with the view of discovering and treating medically all persons infected with tapeworm. Unless these measures are adopted, we may confidently expect a gradual extension of this form of disease in India.

But ignoring the probability of meat in India being cyst-infected, that supplied to the troops and brought into the bazars for general sale, is ordinarily of the most inferior description. In the hot weather especially, the carcase of a sheep would almost serve as the substitute for a glass lantern, would certainly, if deprived of the colouring of the red globules, permit the passage of light with as great facility as the horn lanterns in use a generation back. Neither, unless artificially fed can cattle or sheep in the hot season be otherwise than very thin. Grass, indeed, does not exist in their jungly pastures more than sufficient to maintain their existence. And contractors are not paid for grain-fed butcher's meat. In that part of India of which we have most experience, a sheep fed on grain becomes, before being thought fit for the table or equal to an ordinarily fed English sheep, from eight to ten times more costly. In other words it consumes from eight to ten times its unfed value in grain. It is therefore manifestly impossible that the barracks can be supplied with grain-fed meat, or that the poorer classes of Europeans can indulge in such luxuries.

But it is admitted on all hands that soldiers should be afforded ordinarily good flesh food. Cattle or sheep, fed to the obesity of Christmas prize animals, are certainly not required. But on the other hand, something more nourishing and digestible than the ordinary barrack meat is desirable, especially during the hot season. The old idea that animal food is not essential in tropical climates, is to a certain extent a mistake. To live

as the natives live, was the advice bestowed years ago on persons coming to India. But those who offered this counsel, do not appear to have recollected, that fat in the form of ghee and butter forms at least as large a proportion in the food of even Hindus in India, as animal diet does in the food consumed by the inhabitants of Europe. And practically, experience shows that Europeans in India require a generous and ordinarily tempting diet. Much of the sickness from which Europeans suffer, which has ere now been in general terms attributed to over-eating and drinking, is in fact, in very many individual instances, more connected with the very reverse. People in India, do not, as is or at least was formerly popularly supposed, live on hot curries, spiced dishes and stimulating drinks. The difficulty in India, especially during recent years and more particularly in Western India, is to procure a wholesome and plain diet. The common necessities of life, such as butcher's meat, fowls, bread, have indeed become so scarce and high priced, that in some stations preserved provisions imported from Europe may be consumed at the same cost! The appetite in a tropical hot season is ordinarily very capricious. Unless fairly good food is presented, it will probably be loathed and remain unconsumed. The strain on the system during the hot and rainy months is severe. Unless a person be properly nourished, he becomes an easy prey to malarious fever. And this having once established itself in the system, paves the way for the whole tribe of tropical ailments, hepatic maladies, dysentery, spleen disease, scurvy, and their various and complicated manifestations. Fairly good food, moreover, by satisfying the appetite, prevents recourse to those deleterious stews, curries, and peppery compounds, which the soldier and others, disgusted by indifferent food and sameness of diet, so frequently indulge in.

Since the mutinies, a larger number of Europeans than formerly have been resident in India. Estimating the Anglo-Indian army to consist in round numbers of some 75,000 men, the number of cattle and sheep annually slaughtered for the consumption of the military alone is necessarily very large. From seventy to eighty of the small cattle of this country, or three times that number of sheep, are required to feed a regiment of 1,000 strong every month. From this large and continuous consumption of flesh food during recent years, from the periodical occurrence of cattle plague, from land formerly pasture having during the American war been converted into cotton fields, and

from an ever increasing dislike of the Hindu population to sell their beasts with the knowledge that the destination is the butcher's shamble, the task of obtaining a sufficient amount of flesh food has been gradually becoming more expensive and difficult. This has led to frequent proposals for, and in some localities to the actual formation of, Government cattle farms. And it is confidently anticipated by those best acquainted with the subject, that the extension of such agencies will be eventually thrust upon Government as the only means whereby an almost prohibitive scarcity of, and expenditure on, flesh food may be avoided.

The objections of the native Hindus to killing kine are well known, and this prejudice extends also to selling kine for the consumption of Europeans. A Hindu will look on with more than the proverbial apathy of the race, while a cow or bullock is dying from disease or starvation, will even treat his bovine possessions with the utmost cruelty and carelessness; but to take the animal's life, especially to kill it for the benefit of the European, is quite a different matter. To prevent this, every endeavour is used by the Brahmans. And the Commissariat officer's emissary, sent into the districts to purchase cattle, often finds his ends defeated by the Brahman, when the Muhammadan or the Jat or other owner of cattle would for the sake of gain pocket his scruples with his money. There are certain localities indeed occupied by European troops where the slaughter of kine is altogether forbidden, and where the European is therefore condemned to a mutton diet, as far as butcher's meat is concerned, the whole year round. Strange to say, Mount Aboo, the principal Sanitarium of Western India, is one of the stations where fresh beef is a tabooed article. A certain class of the people—the professional religious orders of the community—object as Hindus to the slaughter of kine. And the interests of the British Government, which should be to render the Hill Sanitaria of India in every manner conducive to health, have been lost sight of in the meritorious desire not to offend the prejudices of the Brahmans and Jains. But the same arguments might apply to other matters, and if so, the progress of India would be altogether stayed. It might indeed apply to our presence at all at Aboo, or indeed in India. For the prejudices of a very large number of natives are still shocked by the sight of the European ruler.

But as the political officers concerned have not been able to obtain permission for the slaughter of kine (and indeed it may be doubted if the endeavour has ever been earnestly made), Government, in order to supplement the diet of the European soldiers sent to the sanitarium, some years since established a piggery on the hill. This, however, as swine must in this country be particularly well fed, is a very expensive arrangement. And, as far as we are aware, it is the only locality in India where pork is supplied to Europeans as an article of rations.

The necessity of salt as an article of daily consumption, and the importance of rendering it as cheap as possible, has long been acknowledged, although perhaps everything which could be done towards the latter desideratum has not yet been accomplished. For instance, while salt is even now brought from Cheshire and France to Calcutta, there is almost any amount of the commodity simply awaiting conveyance from the salt districts of Rajputana. But in order to force the sale of British manufactured salt, an almost prohibitory duty has been placed on salt imported from the native states. The salt customs' line, marked by a great hedge, sometimes living, sometimes dead, and guarded by the customs' preventive service runs from one side of India almost to the other, and while preventing the importation of Rajputana salt into British Provinces, maintains the price of salt made in British territories or brought from England or France to the Calcutta market. Similarly, the passage of Rajputana salt south towards Bombay is equally guarded with zealous care, lest it should interfere with the sale of sea-coast salt, or the article manufactured at Patree in Bombay. Notwithstanding this exclusive policy, it is stated, however, that the price of salt throughout British India is not prohibitory, that the people can obtain as much and that as cheaply as they require. But we cannot believe this to be the case, while salt brought from the other side of the world sells as cheaply as that manufactured within 150 miles of Agra, or while salt costing at Sambhur in Marwar six annas is worth as many rupees in Agra. Even if the people themselves throughout the N. W. P., or indeed in British India generally, do not suffer from the want of cheap salt, there is reason to believe the cattle do, and that thus indirectly the inhabitants of the land

suffer from the maintenance of the present policy. The value of salt in the internal economy of animals is at least as important as in the system of human beings. Cattle in their wild state always frequent, particularly at certain constitutional periods, localities where salt is easily obtainable. Oxen, horses, cows, sheep, all require salt to enable them to thrive. But the present selling price of salt in the N. W. P. and other districts, certainly does not permit that *ad libitum* use of the article so desirable. And there is no doubt that the rates at which salt is sold for human consumption, would bear reduction. In the meantime not one-tenth of the salt available in India is ever brought into the market. The great Sambhur salt lake alone presents acres of crystallized salt, which if it were collected would yield hundreds of tons, but which year after year is washed away by the periodical rains. In other parts of Marwar also large salt fields exist—all now practically useless for the supply of British India.

It is, however, now understood that the Government have succeeded in leasing the salt lakes of Rajputana from the native states of Marwar and Jeypur. This will eventually open up the principal salts of India to general consumption, and render the country altogether independent of imported salt. And although during the present financial crisis we cannot look for much reduction of the duty, there is no doubt that eventually this desideratum will be achieved.

In 1863 the use of salt as a prophylactic against cholera was revived in India by Dr. Beaman, whose father years previously advocated a similar theory. Ten or fifteen grains of salt are to be taken twice or thrice daily, independently of the amount consumed with the meals. Dr. Beaman attributed the freedom from cholera of the prisoners in the Hoshungabad Jail to the prophylactic use of salt, and the papers on the subject were forwarded to Government through Colonel Meade and published in the *Calcutta Gazette*.* Unfortunately, however, we cannot place more faith in the powers of salt taken into the system as a preventive of cholera, than in the assertions which have sometimes been made regarding the freedom of localities from cholera or malarious fever, where the ground is encrusted with saline material. Mooltan, long free from cholera, was at one time said to owe its exemption to this cause, and the same

* Vide Supplement to the *Calcutta Gazette*, May 20, 1863.

has been stated of other places. But eventually, as at Mooltan, cholera has appeared to confound the theories formed.

Very little attention had been paid to the supply of drinking water previous to the report of the Royal Sanitary Commission published in 1863. In that volume may be seen Miss Nightingale's sketch of the Bhisti and Mussack, entitled 'the beginning and end of the water pipe,'—a method of supply which obtains as extensively now as it did then. "Words," says the authoress, "cannot convey the actual state of things." The absence of pumps is much commented upon, and the adoption of some civilized method of supplying barracks, garrisons and towns with water is urged. The Sanitary Commissioners reported the unsatisfactory condition of the water-supply to be one of the cardinal defects of Indian stations, and having obtained numerous reports on the subject, and after *viva voce* examination of many familiar with Indian life, they state, "there can be no doubt, that the water supply "in most of our stations is extremely unsatisfactory, and that "it is often contaminated by organic matter to a most "dangerous extent." Analysis of all water is therefore recommended; and the Indian Cholera Commission arrived at very much the same conclusions.

The condition of the water in the towns and villages of the mofussil has been referred to in our remarks on epidemic fever, where certain simple measures proposed for purification are also noted.

In 1864-65 certain medical officers were permitted to receive instructions with regard to the chemical analysis of water from the Chemical Analysers to Government at the Presidency Towns. And by this agency a trustworthy examination of the water at most of the principal military stations was obtained.

In 1866 the opinions of various authorities were obtained regarding the propriety or otherwise of permitting vegetation to exist in water. The conclusions generally expressed were to the effect that a certain amount of both animal and vegetable life in standing water is desirable, to maintain it in a good condition.

In 1867 a Government circular called for reports as to the best method of filtering water for barracks, &c. And here we venture to quote a proposal then made. "I have long been "of opinion, that most water supplied to barracks should first

“ be filtered, then boiled, and lastly passed through another
“ apparatus. By the first step organic matter is removed, by
“ the second matter in solution is precipitated, by the third
“ the sparkling property is restored by the re-admission of air
“ into the fluid expelled by the boiling. This might easily
“ be brought into practice by the use of three iron tanks of a
“ size sufficient to contain drinking water for the use of those
“ inhabiting each building or block—the first and third tank
“ to be furnished with filtering material, the middle to be used
“ as a boiler,”

In 1869 rules for determining the presence of organic matter in water, framed by Dr. Macnamara, were published by authority. In a preface to these rules, Dr. Macnamara remarks that the means for determining the presence of organic matter are very definite and simple, and so well known that an Assistant Surgeon fresh from Netley is as competent to lay them down as the most experienced chemist. The methods of determining the condition of water mentioned are—taste, smell, appearance, microscopical appearance, the gold test, the permanganate test, and the more tedious process of evaporation and combustion of residue.

The Army Sanitary Commission at home recently recommended that wells in India should be avoided, or at least that water therefrom not used for drinking purposes, unless at a distance from dwellings and carefully covered and protected from subsoil filtration. The Commission justly remark that without pure water, millions may be spent on barracks comparatively in vain. Rivers, streams and lakes are indicated as the better sources of supply. But at very many Indian stations there are neither lakes nor rivers, so that the population is *ex necessitate* entirely dependent on the wells. We have already spoken of the dirty habits of the natives with regard to the village tanks, from which so many draw their supply. Neither is much better care taken of the wells. People wash themselves and their clothing at the brink, and are not at all particular whether the water so used escapes on the surrounding surface, or again descends the shaft. A native would not hesitate to wash his cooking utensils, or his clothes stained by cholera discharges, at the mouth of the well from which he draws his water; and indeed, as we can state from our own knowledge, he would feel much aggrieved, if prevented from doing so. Yet all the water we drink

in India, the soda-water, the tea, the coffee, the 'brandy-pani,' the Indian-brewed beer, is liable to contamination from such a cause.

The Sanitary Commissioner for the Panjab, after mentioning the "fecal matter, the old bones, the empty sardine boxes "and preserved-soup tins," through which Simla water trickles, proposes the storing of rain-water for the supply of that station. And it is stated that rain-water may be kept fit for drinking in common bottles uncorked during the whole hot weather, Where the rainfall is sufficient, it may be advisable thus to substitute for well-water. But in many districts, particularly of Western India, the rainfall is not sufficient to fill cisterns without collecting the water from a large surrounding area, a necessity obviously leading to the mixture of impurities. The common pump, not yet introduced into India, would effectually prevent the contamination so common from the prevailing practice of drawing the water from the open wells. And until pumps are ordinarily used, we fear, boiling and filtering are the only certain, although troublesome, means by which we can secure wholesome drinking water.

The foregoing sketch, although confessedly imperfect, is still at least sufficient to demonstrate that sanitation has become the earnest desire of Government. A reference to almost any of the subjects named will show the minute care and attention which has been paid to the matters in question. Neither has Government hesitated to spend the public money, in whatever direction the desirability of expenditure has been proved. And this we regard as the crucial test of earnestness in the work. In former days, within the memory of the present generation of Indian officials, any such remarks would have been altogether inapplicable. At a time when the authorities did not even attempt to sanitize for their own European soldiers, any attempt to do so for the country generally could scarcely have been looked for. And in fact the records of the period referred to are totally destitute of any reference to sanitary science. With regard to the military, the feelings expressed by an officer of distinction (now in the sere and yellow leaf of age, and *otium cum dignitate* of Bayswater retirement) prevailed that "so long "as the men were on parade, they might go to the d—l during "the intervals." Of endeavours to amuse, instruct, occupy, or even to house and feed the soldiers properly, there were

literally none. Now, many think the men are almost too tenderly cared for. A certain General was reviewing the troops at a mofussil station, when the medical officer suggested the desirability of upper-storied barracks, as a means whereby the prevalent fevers might be rendered less frequent and fatal. "Upper storied barracks"! exclaimed the chief, totally ignorant of the laws relating to malaria, "never heard of such a thing, and don't see the good they would do!" And, any suggestion regarding the sanitary condition of the country at large was treated with equal derision and contempt. Even at the present time, it not unfrequently happens that the best intentions of Government are frustrated by the obstinacy or ignorance of local officials. As a rule, however, such is not the case. There is generally an earnest desire to carry out the sanitary objects of Government. But at present, we can but be said to be commencing a gigantic task. As Grant Duff recently remarked, "We are fighting against space, and the word *we* denotes a mere fraction of active-minded persons, official and non-official, amongst millions upon millions dull with the torpor of ages." But there is no doubt that we shall succeed.

ART. II.—THE ORGANIZATION OF THE PUBLIC WORKS DEPARTMENT.

THAT the taxpayers of India will have to find the interest upon many millions of money, irretrievably sunk for good or bad in State railways and canals, is pretty certain. Whether the investment repays itself, in a magnificent series of useful undertakings cheaply and quickly carried out, or whether it ends in a woful collapse, leaving the finances of the State finally shattered, and the country covered with half-finished monuments of folly and waste, mainly depends upon the efficiency of the Public Works Department, and upon the healthy check exercised over its operations by intelligent criticism.

We propose to give a sketch of the present constitution and working of the department, and to point out what appear to us to be its chief defects, regarded as an agency for the expenditure of public money.

The ultimate authority in this, as in all other branches of the Government, is of course the Secretary of State in Council. His functions chiefly comprise—first, the decision upon great questions of policy, such as the execution of railways by the State or by private companies; secondly, the sanctioning of increases of establishment, and the ultimate disposal of questions relating to the pensions, leave rules, &c., of the staff; thirdly, the recruiting of the service from time to time by sending out civil and military engineers; fourthly, the provision of all stores, plant, machinery, &c., which have to be procured from Europe; and lastly, the actual sanction of all works, the estimated cost of which exceeds £100,000.

The head of the department in India is the Secretary to the Government of India, who is the mouthpiece of the Governor-General in Council, usually represented by a single member who takes the Public Works business as his speciality. The Secretary has two or three assistants, and is advised on matters concerning their own particular branches by Inspectors General of military works, of irrigation, and of forests. Nearly everything of importance has to be referred to the Government of India, and the quantity of detail disposed of in the Secretary's office is astonishing. The centralization of the department, although diminished

since the evil days of the Military Board, is still excessive, and materially impairs its efficiency, as we shall have to show by and by.

Under the Secretary to the Government of India, are the Chief Engineers of the several provinces, who are also Secretaries to the local Governments and Administrations. A Chief Engineer, *quâ* Chief Engineer, acts for himself and speaks his own opinion; but, *quâ* Secretary, he is only the mouthpiece of the Lieutenant-Governor or Chief Commissioner. Local Governments and Administrations (excluding Bombay and Madras, with which we do not further concern ourselves) have power to sanction works up to a limit varying from £500 in Port Blair to £2,000 in Rajputana and Hyderabad, and £5,000 in the Punjab, N. W. Provinces, and Bengal.

The province under each Chief Engineer is divided into five or six 'circles' under Superintending Engineers, who have nothing to do with the expenditure of money themselves, and can only sanction works up to £50. The Superintending Engineer is supposed to be the eyes of the Chief. It is his especial business to look after the Executives, and to give authoritative professional opinion on all engineering points requiring local knowledge. At the head of each extensive work, such as a canal or an unusually important road, is a Superintending Engineer, who in that case generally draws out the designs. In ordinary circles, containing a miscellaneous collection of divisions, designs are more often prepared by the Executives.

Under each Superintending Engineer are several divisions controlled by Executive Engineers, who are the actual disbursers of the public money, and the responsible agents for the due execution of the works. The Executive Engineer, aided by a staff of assistants, who are sometimes themselves junior Executives not yet entrusted with divisions, draws out designs and estimates for works, sets them out, purchases or manufactures materials, collects work-people or arranges with contractors, supervises the execution, and renders monthly a very complete and elaborate set of accounts, compiled ready for audit, to the Controller of Accounts for the province. The duty of the latter officer is to keep the Executive Engineers supplied with funds, to audit their expenditure upon their monthly accounts, to regulate the outlay according to the budget allotment for the year, and to compile a set of books for the province, from which in turn the Accountant-General prepares the books of the whole empire.

Some six or eight months before the beginning of the official year the Government of India intimates to the several local Administrations what are the sums, in round numbers, which can be assigned to each province for Public Works during the ensuing year. Upon this basis the Provincial Budget is framed. The budget is really a programme for the year, showing the total amounts to be spent in the province on original (or new) works, repairs, establishment, plant, and guaranteed or aided works. It further shows how the different sums allotted to these several heads are to be distributed among the particular works in hand.

It is obvious that unless Public Works expenditure is to be altogether excluded from the imperial accounts for the year, some such programme must be laid down and adhered to. When a private company constructs a railway or dock, the works are completed as fast as the contractor's appliances permit, or at any rate as fast as funds can be raised. But Government could not allow local authorities to sanction any number of works within their powers, and spend away upon them until they were completed. Under such a system, the Finance Minister could never calculate beforehand what expenditure he would have to provide for in any one year. The funds available for the whole empire, and consequently for each province, are limited, and it is necessary for the local Governments to arrange beforehand how to spend them to the best advantage. But on the other hand, when once a work is commenced, economy requires that it should be carried out to completion as soon as possible. If works are suspended or only languidly prosecuted, the pay of permanent establishments which must be kept up is wasted, the interest on money already spent is lost, materials are spoiled, and finally the work costs much more than it should have done. Take the case of a canal, which should cost a million, including interest, if made within ten years, but which through mismanagement takes 20 years to complete. Suppose the interest on the money raised for its construction to be 5 per cent, and the net returns of the canal to be £50,000 a year. If the canal had been finished at the end of 10 years, the returns would just have paid the interest, and there would have been no loss to Government. But the ten years of delay in completion will have added, say, 10 years' interest at 5 per cent on half a million, or £250,000 to the capital account which will now stand at £1,250,000. As the returns by the hypothesis will

only pay interest at 5 per cent on £1,000,000, the interest on the excess capital, or £12,500 a year, will be a permanent annual loss to Government *for ever*. It is easy therefore to understand what enormous loss may be occasioned by any unnecessary delays or impediments in the prosecution of works when once begun, and how careful Government should be, in commencing a series of State undertakings, to remove all obstacles from routine and red-tape, and to afford every facility to their agents to work rapidly as well as cheaply.

In the calculation above made we have not taken into account the cost of establishments during the additional ten years, which would add not less than 50 per cent to the original capital account, nor the loss of the revenue for ten years, which would be another 50 per cent. Adding these to the quarter of a million already shown to be lost in interest alone, we arrive at the startling result that a canal, which could be completed in ten years for one million, would, if the construction were extended over twenty years, stand Government in no less a sum than two millions and a quarter.

We need go no further to find the reason why the Ganges and Baree Doab Canals have given such a poor return on their cost. It is not too much to say that each of them could have been constructed by a sufficient staff of experienced English engineers and contractors, kept supplied with funds and not hampered by excessive red-tape, in one-half the time they have actually taken. This reduction of time would have been equivalent to a reduction of cost by one half also, and consequently the present rate of remunerativeness would have been just doubled.

We trust that the Government will not lose sight of these considerations, and that they will not, in order to make a show of great progress, commence more railways and canals than they can find men and money and labour to prosecute vigorously.

Unfortunately the Budget system has a tendency to cause the frittering away of money upon a great number of projects, none of which can be afforded sufficient funds to allow of satisfactory progress. The local Government probably finds itself when about to prepare the budget, beset by demands from all quarters for grants which would swallow up three or four times the sum at its disposal. Rather than deny the clamorous applicants altogether, a sop of ten thousand rupees here and twenty thousand there is thrown to them,

without duly considering how the works thus begun are ever to be completed. One sees public offices set down for a grant of ten or fifteen thousand towards a total estimate of a lakh and a half: a bridge, which is to cost three lakhs, receives money one year sufficient to sink the foundations, which are then left untouched for a couple of years, because all available funds are required to begin new jails with, and so on. The great principle, it appears to us, should be, to begin new works very charily, but once begun, to keep them steadily pushed on to completion. Not till all the works in hand have been allotted as much as they can economically absorb, should one rupee be given to new undertakings, however urgent. At first, of course, the strict enforcement of this rule would cause some inconvenience, and a considerable outcry from the promoters of pet projects; but in the long run it would lead to so much more care in the selection of works to be commenced, that the really urgent ones would be certain to be taken up first.

To ensure the observance of the rule, we would require all local authorities, when sanctioning a work, to fix the time within which it is to be completed; and to specify the sums to be allotted to it during each year that it will be in hand. In arranging the budget for any year, the allotments thus previously determined should be obligatory upon the local Governments, who should not be permitted, except with the sanction of the Government of India upon satisfactory cause shown, to diminish any of them. Only the balance left after providing these obligatory grants should be disposable for the commencement of new works. We should not then see, as we now do, the piers of a bridge left standing year after year without a superstructure, barracks without roofs, or—worse still—roof-frames without a covering, roads that end in the middle of a desert, and ‘navigable’ canals without lock-gates—all because ‘no funds are available. We even think it might be advantageous to issue a decree that no local Government should be allowed to begin any new work whatever for the next ten years, the whole of their funds being devoted to the completion of works now in progress.

The provincial budget is prepared mainly from the recommendations of the Superintending Engineers upon the divisional budgets of the Executives, who, from their local knowledge and personal contact with the official and non-official residents of their districts, are best able to suggest the public improve-

ments most urgently wanted. Their proposals for expenditure must be accompanied by estimates, upon which we shall next have something to say. The mere provision of a grant in the budget for a given work is no authority for the work to be put in hand until a detailed estimate has been sanctioned. This estimate comprises, first, a report giving the history, object and a general description of the project; secondly, a specification detailing exactly the kind of work and nature of the materials to be used in each portion, the dimensions of the several parts, the mode to be adopted for overcoming any special difficulties, and generally all details necessary for the guidance of contractors; thirdly, a bill of quantities showing by detailed measurements how much of each kind of work, such as excavation, brick work, arching, &c., will have to be done, and fourthly, an abstract showing in a few lines the total cost of the work. The abstract gives the quantity, description, rate per unit, and cost of each kind of work, or 'sub-head' of estimate, and also shows the total quantity and cost of the principal materials to be used.

It is by means of the abstract of the estimate that the Controller checks and audits the expenditure of the Executive Engineer, who is obliged to show in his monthly accounts the expenditure and progress on each sub-head of the estimate up to date; and if either the total quantity executed, the total cost, or the rate per unit, exceed those sanctioned, he has to give explanations, and to obtain the approval of the Superintending Engineer or higher authority.

The system of estimates is excellent, but there are two drawbacks in the working of it. There is an undue tendency, springing from a laudable desire for economy, to cut down estimates, which leads either to bad work in order to keep within the sanctioned amount, or to excesses over estimate, requiring further grants, and leading to disappointments and reproaches on account of the unexpected cost of the undertaking. We think that Executive Engineers, when competent men, should not be obliged to lower estimates contrary to their own judgment, but when an estimate has once been submitted, it should be understood that very good reasons would be expected for any excess over it. At present revised estimates are almost a matter of course; perhaps not one project out of three is completed within the original calculation. The result is, that Government, in sanctioning a project, never know what

they are being let in for. In Madras at one time it was a regular practice to send in estimates which were known to be insufficient, in order to induce a grant of funds; when the work was half done, Government were told that the money was all gone, and that having spent so much, they must finish the job or lose all they had sunk.

The other drawback to the system of estimates is this. Taking out quantities is a laborious and tedious process, for which the multifarious duties of the engineers seldom leave them time, and hence the detailed estimates are often not submitted till the works are half finished. In England, this work is done by a special class, the building-surveyors; an engineer or architect seldom thinks of doing it himself, but hands it over to a surveyor who not only calculates the quantities, but for a certain percentage guarantees them against error; that is to say, he undertakes to pay the contractors any extra charge arising from mistakes.

In some offices in India, there is an 'estimator,' but he is usually a mere clerk with no practical knowledge, and, therefore, his estimates are not worth much. There should be a regular surveyor attached to each Superintending Engineer to relieve the Executives of all heavy estimates, and if this were done, greater strictness might be enforced as to sending them up before beginning work. It is true that every now and then a circular fulminates threats against all engineers who begin works before estimates are passed, but there is so much delay in getting the regular sanction, and such pressure always finds its way downwards to put the work in hand 'in anticipation of sanction,' that the circulars have little effect.

The delay in getting estimates passed, even when they are prepared, is a great defect. As we have already mentioned, all estimates above a certain limit must go up to the Government of India for sanction. Now if the Government of India would confine itself to considering whether a certain work is wanted, and whether on the whole it is worth the proposed cost—in other words if only the report and the abstract of the estimate were sent up, there need be no delay in giving or refusing sanction; but the Government of India interferes in details of the specification and design, and sometimes returns the whole project for revision in some insignificant point. As regards engineering design, a project prepared by an Executive Engineer (who ought not to be entrusted with such

work if he is incompetent) and passed by two such experienced officers as the Superintending and Chief Engineers, ought surely not to require cobbling in the Supreme Secretariat. And the ludicrous part of the business is that the orders issued in the name of the 'Governor-General in Council' come really from a Deputy or Assistant Secretary, much junior to the officers whose designs he criticises. Until quite lately, 'Civil Works' were taken up by an Assistant Secretary who was only an Executive Engineer in the department, but who, in virtue of his position, could over-rule the engineering opinion of every Chief Engineer in India.

The system of allowing so many cooks to meddle with the broth, naturally often spoils the result. The Executive Engineer's designs are altered by the Superintending Engineer, altered by the Chief Engineer, and very likely returned for revision by the Government of India. Hence endless waste of time; and eventually a design is adopted which is a compromise between three or four opinions, for which nobody is responsible, and with which nobody is satisfied.

For all works costing less than Rs. 5,000 the Superintending Engineer's decision as to design should be final; for works above that amount the Chief Engineer of the province, aided by a special Consulting Engineer, selected solely for professional skill, should be the final authority. If the Superintending Engineer cannot be trusted to design a work costing only Rs. 5,000, he is not fit for his position; in the case of the Chief Engineer, who is also Secretary to the Local Government and is therefore selected for other than purely professional qualifications, the aid of a Consulting Engineer may be advisable, but there should be one for each province, so that he may visit localities, consult the engineers on the spot and decide from personal knowledge.

Works of special magnitude or unusual difficulty would be referred to a Consulting Engineer to the Government of India, an appointment which should be highly paid and filled by the most practical engineer in the country. These consulting engineerships, besides providing specially skilled advisers on engineering points, would be advantageous in affording prizes for a class of men most useful to Government, but for whom the department at present offers little encouragement—we refer to the purely practical engineers who have no time for office work, no taste for the Code or accounts, and no talent for writing, and who, from these deficiencies, are never likely to rise in the regular course.

The arrangements suggested above would do away with much of the delay at present caused by continual references to the Government of India, and would enable Government to enforce a rule most essential, not only for proper audit, but for proper execution of works,—“No project shall be commenced until the detailed designs and estimates are sanctioned.”

We have had occasion to find fault with some of the regulations of the Public Works Department, but we must express our admiration of the Code taken as a whole, and of the very perfect system of accounts embodied in it. The time has indeed come for a modification of the principle upon which the system depends; but granting the principle—that of a detailed audit by a central office, the means devised for carrying it into effect are excellent. In a moderate sized octavo volume are contained complete and exhaustive rules, concisely drawn up, systematically arranged, and admirably indexed, for every detail of the working of the department. When they compare the Code as it stands, with the cumbrous and chaotic volumes of orders and circulars which it displaced, or with the labyrinth of Queen's Regulations, Pay Regulations, War Office Circulars, G.O.G.G's, G.O.C.C's, and general orders and circulars from half a dozen officers which an unhappy Brigade-Major or Assistant-Adjutant-General must have at his fingers' ends, the officers of the department may well bless the compilers of the Code. And as to the system of accounts, much as it is abused by new-comers, and grievously as it presses on officers whose whole time and attention is required for the due performance of more strictly professional duties, we believe those who have longest studied and worked it are those who appreciate it the most highly.

It is not to the system itself but to the manner in which it is applied that objections may fairly be raised, and in order to make clear what these objections are, we must briefly sketch the history of the Public Works Accounts.

In the early days of the department, when an estimate was sanctioned, the engineer was allowed to draw month by month the sums which he required until the work was completed, when a bill was sent in, the audit of which cleared his responsibility. During the progress of the work, he submitted a monthly account current and other documents showing the expenditure he was incurring, but the whole amount, until the final bill was audited, was held in 'inefficient balance' or a sus-

pense account against the personal debit of the officer concerned. At one time an Executive Engineer could not retire from the service, or even leave the country without giving security for these outstanding balances, and as officers were changed from time to time, it might happen that an engineer was personally accountable for lakhs of rupees spent years previously by others. There was great delay in getting the bills finally passed, and the principles of audit were most objectionable. It was insisted that the final bill should correspond exactly in items, in quantities, and in cost, with the original estimate : any differences, if in excess, were severely visited, and even retrenched from salaries. The exact correspondence expected between the estimate and the bill can never be actually attained in practice, and hence grew up a system of fudging the accounts, and even of transferring savings upon one estimate to cover excesses upon another, to protect the engineers from retrenchments of pay. Government in fact expected their officers to contract to do the works for a certain sum. If a saving resulted, Government were to pocket it ; if a loss occurred, the engineers were to make it good.

The abuses to be expected from such a system became so great that commissions were appointed in the several presidencies, and upon their reports an entire re-organization of the department was effected about 1856. The principle adopted was a local audit of the current expenditure month by month by a provincial Controller, having branch offices of account attached to each Superintending Engineer. Three sets or stages of accounts were established. First, the disbursers showed in pay sheets, purchase lists, and contractors' bills, their cash expenditure on each sub-head of each work, corresponding with the estimate for the current month ; and in a separate set of accounts their expenditure of materials in quantity only, not in value. From these papers, submitted by the Executive Engineer to the branch office of account, the divisional accounts were compiled, the expenditure of materials was turned into money values, and the transactions of the whole division were brought into a general schedule, which showed the cost and rate per unit of the work done up to date compared with the cost and rates sanctioned in the estimate. At first it seems to have been intended that whenever the estimate rate was exceeded, the amount of the excess should be retrenched from the disburser's pay, failing a satisfactory explanation ; and the branch office was attached to the Superintending Engineer in order

that he might determine in each case, whether the retrenchment should be made final. But it was soon found that rates could scarcely ever be kept down to correspond with the estimate at the beginning of a work ; also, that the account branch, being composed of clerks ignorant of professional details, made interminable mistakes in their compilations, and the plan of retrenchments has gradually died out. The detachment of the branch accountants from the Controller's office was thought inconvenient, and the compilation of the divisional accounts was transferred, first to the central office, and ultimately to the Executive Engineers themselves. The Controller's duties are now confined to auditing the schedules submitted by the Executives, to checking their vouchers and to preparing the provincial books—the third stage referred to above—with some other matters which need not be detailed.

The removal of the audit from the cognizance of the Superintending Engineers to a central office, not always presided over by a professional engineer, and where the bulk of the work must be done by unprofessional clerks, has worked badly in two ways. Whoever has to check and audit engineering accounts, should himself know something of the mode of executing works ; he should at any rate know the technical terms employed, and be able to exercise an intelligent, not merely a mechanical, criticism. The want of sufficient practical knowledge not only causes many objections to be made which seem to the engineers vexatious, but leads to very many items being passed which ought to be inquired into. In truth, notwithstanding the elaborate and laborious contrivances to the contrary, nothing is easier than to bamboozle the central office. An Executive Engineer, who wishes to lead a quiet life, has only to hand over the whole affair to a sharp accountant and hold his tongue, to escape being troubled by the Controller. Some day or other perhaps comes an explosion ; but the original culprit has probably been removed to a higher sphere ; there is a good deal of official spluttering, and in a very bad case perhaps a minatory circular, but it all ends in smoke. On the other hand a conscientious officer who looks into accounts himself, and won't have things made pleasant, soon finds himself at loggerheads with the subordinates in the central office, and is looked upon as a nuisance by the Controller.

The Executive Engineer also is in the unpleasant position of serving two masters, whose demands are incompatible.

If he really does all that he ought to do in his office, and looks thoroughly into his accounts, he has very little time for supervising works, scheming out designs, elaborating arrangements for materials, economising labour, and so on. Either the Superintending Engineer falls foul of him for not getting on, or the Controller for being behind with his returns; each master can stop his promotion, and he is lucky if some disappointed contractor does not gibbet him in the papers for an incompetent idler into the bargain.

That the divisional accounts should be compiled in the executive offices is undoubtedly the right plan, but the addition of this work has made the burden of a division too heavy to be borne by one man, and should have been accompanied by the division of labour we have before advocated. This and some other points we must defer discussing for the present.

We have explained how funds are provided and how estimates are passed; we have next to speak of the actual execution of the works. Here the over-centralization, already mentioned as delaying the sanction of designs, exercises its worst effects. The Executive Engineer is supposed to be guided by a passed estimate, in which the work to be done and the mode of doing it are laid down in minute detail; and he is checked by a Controller of Accounts, who monthly reviews his proceedings and compares them with his estimate. This might be thought a sufficient control, aided by frequent visits of inspection from the Superintending Engineer; but no, the Executive is hampered by innumerable restrictions upon his every proceeding. The origin of so many restrictions we shall have to discuss by and by in describing the system of accounts. In the first place, although the estimate has been passed, materials cannot be prepared or purchased without a fresh estimate, which may have to go up to the Government of India (which cannot possibly know the local cost of materials for every division) for sanction. Here is a delay of three or four months again. Strictly speaking, the rule applies only to materials required for store, or 'stock' as it is technically called; but when a number of different months are in hand, it is impossible to say beforehand in which of these the materials will be used, and so they have to be passed through the store or 'stock' accounts, and estimates must be submitted for them.

Having got his 'materials estimate' sanctioned, the Executive Engineer's troubles are not yet over. He cannot accept

a tender from any contractor exceeding £200 ; all tenders from £200 to £1,000 must be referred to the Superintending Engineer, and those exceeding the latter amount must go to the Chief Engineer. Remembering that an ordinary kiln of bricks costs more than £200, and that the earthwork for a couple of miles of road costs probably more than £1,000, it can easily be conceived how business is hampered and delayed by these references. However, it will be observed that the most important tenders are referred to the Chief Engineer who knows least about the circumstances. Either he must be guided by the Executive's recommendation, in which case the latter officer might as well have decided himself, or he must accept the lowest tender which is often the least eligible. It is doubtless advisable that some supervision should be exercised over transactions of large amount, but it would surely be sufficient if the Executive Engineers were directed to report the acceptance of each tender as it occurred.

But there are still more objectionable features in the rules about contracts. An Executive is not only prohibited from accepting a single tender over £200, but he may not accept any tender, however small, if the amount added to previous contracts made with the same contractor exceeds the above limit. Now the Executive of a large division spends from £5,000 to £10,000 a month, so that he must either have innumerable petty contractors, or be continually sending up petty tenders to the Superintending Engineer for acceptance, or cut the knot, as many officers no doubt are driven to do, by neglecting the rules altogether. The Superintending Engineer himself cannot accept a tender, if it makes the total engagements of the contractor exceed £1,000.

Only those who have experienced the difficulty of dealing with natives can fully appreciate how much these rules obstruct business. When a native makes a bargain, if it is not closed at once, he immediately begins to think that he might have made better terms, and probably, when after some delay he is called on to execute an agreement, he backs out, or is not to be found. It is easy also to understand how these rules prevent a good man of business from many economical strokes of policy, and spoil many a good bargain. In short, the rules strike at the fundamental principles of business transactions, secrecy and promptitude. Everything goes through offices in which half the clerks are in the pay of contractors, who are kept informed by them of all tenders received.

It is quite true that many engineers are not good men of business, and could not safely be left to make all arrangements themselves. But Government, in this as in other matters connected with the department, does not sufficiently recognize the principle of division of labour. Not only are officers shifted about from roads to canals, from canals to railways, from barracks to mechanical work-shops, without reference to their previous training and experience; but each engineer, besides knowing all these branches of the profession, is expected to have the qualifications of an accountant and of a contractor's agent. There are many good men of business in the department who are not and never will be engineers in the proper sense, just as there are many men excellent at professional work, who cannot manage accounts and expenditure efficiently. We shall suggest hereafter a plan for utilizing both classes more satisfactorily than at present; in the meantime we must return to the execution of the works.

Limited as are the powers of the disbursing officers in arranging for labour and materials, the restrictions as to tools and plant are narrower still. An Executive Engineer can purchase materials for a given work up to £200; but he can only purchase tools up to £20, and even the Superintending Engineer can only sanction up to £50. These limits have been fixed to correspond with the sanctioning powers of both officers as regards original works, but the analogy is incorrect. A new work is a separate expense by itself, and the sum available for the whole province for minor works is so limited, and the necessity for careful selection of the most urgent so great, that we are not inclined to question the rule which requires all but the most petty new works to be sanctioned by the Chief Engineer of the province. But when money is provided for a large undertaking, such as a great bridge, a line of road, a canal, or a railway, the expenditure of a certain sum for necessary appliances is implied, and beyond possibly limiting the expenditure under this head to a percentage on the total cost of the work, the officers in charge of it should be allowed to procure such tools and plant as they need; or at any rate the limits should be extended to those fixed for the acceptance of tenders. If the Executive Engineer of large works cannot be trusted to order a few pumps or a score of wheelbarrows on his own responsibility, he is unfit for his post. So the Superintending Engineer; if the officer at the head of a line of railway or a large canal cannot

judge what plant is required for it, let some one be put in his place who can.

If every officer could answer all letters by return of post, this system of reference to two or three authorities, one after the other, might not do so much harm; but the routine work in the Superintending and Chief Engineers' offices is so great—the latter often sending out from 5,000 to 6,000 letters per annum—that every reference causes a delay; it may be only a fortnight, but it may be two or three months, and when these references have to be made, and the 'regular channel' gone through at every step from the first initiation of a project to its close, our readers may begin to understand why the P.W.D. is so slow in getting work under way and so dilatory in bringing it to completion.

There is a further cause of obstruction in this matter of tools and plant. A local Government can authorize any quantity of machinery to be bought in Calcutta or elsewhere in India, but no one can order the smallest thing from England except by indent on the Stores Department of the India Office—a very nest of Barnacles. Stores so ordered *may* come out in six months, but on the other hand they may, and sometimes do, take from one to three years!

Under a better system, with the help of the telegraph, any machine or engine wanted might easily be landed in India within four months from the date of the order. Something like the following plan might be adopted; twenty or so of the best firms in mechanical engineering should be invited to furnish an annual catalogue, priced F.O.B. in an English port—an engineer requiring plant would select from the catalogues (copies of which should be furnished to all officers in charge of large works) the cheapest and most suitable articles for his purpose, and would telegraph his order direct to the firm. Arrangements could easily be made to inspect and pass the machine in England, if thought necessary; but high class firms do not find it worth while to send out inferior work, especially to a large and steady customer. The present cumbersome system, arranged for the supply of stores of a different kind, is not at all adapted to the provision of contractor's plant, and must be altered now that so much of the latter will be required for the new railways and canals, unless progress is to be indefinitely retarded.

It may be asked, why not procure plant in Calcutta or Bombay? The fact is, the presidency merchants are not at all

alive to their own interests. They are accustomed to charge enormous prices to ordinary purchasers, and they do not understand the policy of securing much larger advantage in the long run by small profits and quick returns from the very extensive custom of Government. We imagine that any firm with the enterprise to get out a good stock of contractor's plant, and the wit to offer it to Government officials at 10 per cent over English makers' catalogue rates (which are much above the *trade* prices) *plus* freight, could soon make a fortune.

We have pointed out that the demarcation of the accounts from the professional branch of the department, and the establishment of the Controller as an authority co-ordinate to the Superintending Engineer, has a distinctly evil effect in producing antagonistic claims upon the Executive Engineers, and in eliminating the professional element which is essential to efficient audit of public works expenditure. We think that a remedy should be sought in a return to the original idea of keeping the audit under the supervision of the Superintending Engineer. To each circle we would attach an auditor, who should have the standing of an Executive Engineer of the first grade, to give him sufficient authority over the Executives, but who should be distinctly subordinate to the Superintending Engineer, with a right, however, of appeal to the Controller, in matters relating to his own duties, just as the Controller is subordinate to the local Government but can appeal from its orders to the Inspector-General for all India. We would limit the Controller's duties to the preparation of the provincial books, and to the settlement of points referred to him by the auditor, with general powers of supervision and inspection of accounts throughout his province. The auditors should all have served in the executive branch, if only for the additional influence it would give them with the engineers; and their accountants should be fewer in number, but of a higher class, than at present. But, briefly, we would make the audit more general and intelligent, less minute and mechanical, than at present. The auditor should work by the side of and in conjunction with the Superintending Engineer, so that his orders would be received as virtually those of the latter, and the sense of divided allegiance would be got rid of. This arrangement would make the reference of objectionable items to the Superintending Engineer a reality, instead of a farce as at present. The plan now pursued is as follows:—The divisional officer makes a list of the items he thinks likely to be objected to, with

his explanations opposite to each. The list goes to the Controller, who makes *his* remarks and sends it to the Superintending Engineer, who returns it to the Executive for *further* remarks. Then the document goes back to the Superintending Engineer for *his* remarks, who returns it to the Controller, who sends it (by this time reduced to an illegible bundle of rags) back again to the Executive Engineer for his *final* remarks, and the Executive returns it to the Controller for final orders about four months after the precious document started on its travels, and usually about two months after all the items have been adjusted in some other way. In ninety-nine cases out of a hundred all this labouring of mountains produces not even a ridiculous mouse; and if the auditor were working next door to the Superintending Engineer, five minutes' conversation, or at most a single reference to the Executive, would settle the affair at once.

Whilst we would fuse to the extent above indicated the professional with the financial *control*, we would divide the two classes of duties in the actual execution of works. There are certainly advantages in making one official design the works, supervise the construction, pay for the labour and materials, and account for the expenditure; but the difficulty is that in large divisions the labour is too great, and small divisions are inconvenient in many ways. They are expensive, as more establishment is required for two small than for one large division; they raise rates by introducing competition for labour, &c., between several officers, where one alone could command the market, and as we have before remarked, it is not every officer who unites in himself all the needed qualifications. The best plan it appears to us, is to have large divisions, and to have one *engineer* and one *agent* in each—the latter to take the place of the contractor in England. The engineer would be the senior, and have charge of the whole division, but his duties would be chiefly professional, while the agent's would be chiefly financial; that is to say, the engineer would make designs and working drawings, surveys and levels, draw up specifications and set out works, supervise the construction and measure up the monthly progress. He would conduct all general correspondence, and the agent would act under his orders. The latter official would be solely responsible for expenditure and accounts; he would frame estimates on the specification and drawings furnished by the engineer, and it would be his special duty to see that all work was done within

these estimates. He would send his accounts, vouched for by the measurements of the engineer, to the auditor, with whom he would correspond directly on all financial matters. Thus the engineer proper would be relieved from the pecuniary responsibility and incessant grind at office work, which now impair his energies and distract his attention. He would have leisure and peace to look after his works, instead of leaving the supervision to inexperienced assistants and untrustworthy subordinates, and we might expect to see a better school of engineering introduced. One main reason why the department is so behind the age in professional matters, so backward in utilizing the advance of mechanical science, is that the officers, however able and zealous, *cannot* get out of the groove. It strains their utmost powers to keep up with their daily work; if they stop the mill for a day or two to try this experiment or introduce that improvement, they are thrown into arrears for weeks. And the ripest and most experienced men, from whom, if not so over-burdened, the most aid to progress might be expected, are precisely the least able to give it. The names of Turnbull, Baird Smith and Dyas, and the ruined constitutions of many who still keep manfully up to the collar, tell too plainly that the work is, in the most literal sense, *killing*. "The path of duty is" indeed "the way to glory," but it is a way that leads through the valley of the shadow of death. When will Government learn to value the talent and experience which ought to be so precious, and cease to waste golden lives by exacting from one man the task of three?

It is melancholy, too, to reflect that much of this excessive labour is wasted, being either mere routine, or work that might equally as well be done by subordinates. Lord Mayo's remark that there was too much writing and too little action in Public Works affairs, had a wider application than he probably intended. He doubtless referred to the ten years' discussion between the Indian and the Home authorities about irrigation, but the remark is equally true of the whole department.

There are two principles to be chosen from in the organization of any extensive agency—the principle of mechanical check and the principle of individual responsibility under good supervision. The men who succeed in life, who make vast fortunes as merchants and contractors, will commonly be found to act on the latter. They first choose the most efficient agents to be

got ; they pay them well, and by liberal treatment endeavour to secure zealous and loyal service. They take care to strain no man's honesty or capacity beyond its reasonable limits, and not to tempt unfaithfulness or sloth by undue absence of supervision. Having thus fixed limits to each man's responsibility, within those limits they *trust* him, and take the risk of his committing a blunder or a crime. On the whole, they find it pay to do so.

The other plan is to get the cheapest agency possible, and to guard against dishonesty or stupidity by mechanical checks. This is a favourite device with governments and joint-stock companies, and it seldom comes to much good in the hands of either. Speaking roughly and generally, it is upon the principle of mechanical check that the Public Works Department is organized, and this appears to us its greatest defect. From top to bottom every man's actions are supposed to be checked by somebody else in every detail. The Executive Engineer must not let a tender without the Superintending Engineer's permission ; the Superintending Engineer must not let one without the Chief Engineer's sanction ; and so on up and down the scale. For every trivial proceeding within each official's scope of duty, he must either get previous sanction from the next highest link in the chain, or report his proceedings for subsequent approval. Everybody is engaged not in doing what he can best do himself, but in sanctioning the proceedings of somebody below him. This is much as if every wheelbarrow were drawn by a cart-horse, and every tumbril by an elephant. It is cracking walnuts with sledges, and forging horseshoes with steam hammers. For a time, we admit, when the department had to be brought out of utter chaos into regular system, every official had to be curbed and checked, but because a child needs leading strings when learning to walk, we are not to insist upon a grown man being so fettered.

The time has come, we would urge, to revise the duties of every grade in the chain of responsibility ; to fix the limits within which each man's judgment should be allowed to have play, and to leave him within those limits free. If there are a few men here and there who cannot be trusted out of leading strings, let them be removed to more appropriate employments, or dispensed with altogether. Government is far too patient of incapables. If it be thought unwise to deprive the Government service of its one great attraction—security, let the noodles be pensioned off. There are not a few Public Works officers, of whom the State would be cheaply rid at a moderate annuity for life.

We believe, however, that even in such cases, but little harm would be done by putting responsibility on the right shoulders. When a superior spends half his time in saying 'yes' to the proposals of subordinates, his scrutiny is apt to become slack, and his assent a matter of course; while the subordinate rids himself of responsibility for propositions he could not take upon himself, by getting his superior's consent. And if subordinates did sometimes go astray, we should escape having able men clogged and fettered by the necessity of 'getting round' a superior who may be fractious, or pragmatist, or a blockhead, for every trifling thing they wish to do.

But personal responsibility must be carried out only under the appropriate conditions; careful selection of the most efficient agents, so treated as to ensure willing service, and intelligent supervision. Whether the Public Works Department can attract the best men into its ranks under present circumstances, and whether sufficient pains are taken to keep them loyal and zealous when there, we do not purpose to discuss. But we have a few words to say as to supervision before we conclude. Of paper check, as we have seen, there is far too much in the department; of real personal supervision there is far too little. The Assistant Engineer is in his office, making out disburser's accounts, and cannot look after his overseers. The Executive Engineer is in his office, answering 'half-margin calls' from the Controller; and cannot look after his assistants. The Superintending Engineer is in his office, transmitting innumerable papers from one office to another, and cannot look after his Executives. The Chief Engineer is acting as Secretary to the local Government, answering calls for information as to the cubic feet of air allowed per mouse in barrack mouse-holes, and cannot visit his province; and so on to the end of the chapter.

All this requires alteration, and the Superintending Engineers especially, who were meant to be and ought to be continually perambulating their circles and stirring up their Executives with advice, approval or rebuke, should not be allowed to settle down into snug stations, where they become mere sanctioning machines, and silt traps for correspondence. The working of a division can neither be judged nor regulated by pen and ink work. Instead of a formal inspection once a year (or not even so often), hurried over in a few hours, the Superintending Engineer should visit each division three or four times a year, and at least once in the year should stay a fortnight, and overhaul

the whole arrangements of the division, while the auditor routed up the working of the accounts. The correspondence of Superintending Engineers would be greatly diminished by having the auditor always alongside ; and it would be further decreased by allowing wider latitude to Executive Engineers. If this did not give sufficient leisure for inspections, circles might be made somewhat smaller ; and it seems to us that this may be found a better way of increasing the attractions of the service (by adding somewhat to the number of Superintending Engineers) than an increase to the pay of the executive grades. The latter affects such a large number that it becomes very expensive, and it rewards alike the efficient and the inefficient ; whereas a greater number of circles would, at a much smaller cost, allow Government to remunerate adequately the best men, whom it is chiefly desirable to propitiate.

It is unfortunate that most of the criticism, freely expended upon the Public Works Department in the press, should be, from want of practical knowledge of its interior economy, wide of the mark and therefore useless. We have shown that we think the system greatly in need of alteration, but cannot agree in much of the abuse of the department which is so common. The sins usually laid to its charge are these ;— 1. Dilatoriness ; 2. Extravagant cost of work ; 3. Bad quality of work ; 4. High rate of supervision compared with expenditure. We may appropriately conclude this article by a brief examination into the justice of these charges.

The first must be admitted. We have already explained the causes, *viz.*, a neglect of the principle of finishing one thing at a time, by what is proverbially described as having “too many irons in the fire,” and also the excess of centralization and mechanical check, which throws so many artificial and needless difficulties in the way of the officers charged with the carrying out of projects. We have suggested what appear to us the necessary remedies ; strict limitation to the beginning of fresh undertakings, and wider latitude with more defined responsibilities for the executive officers.

The second charge we also admit to a certain extent, but not in the way in which it is popularly made. We consider that the ultimate cost, more especially of large projects, is unduly enhanced by the delays in bringing them to completion. But it is not correct to imagine that the *rates* of work in the department are excessive. Wild assertions are sometimes made

that Executive Engineers pay 50, 100, or 200 per cent above the market rates; but if this were so, we should see much more competition for contracts. The saving of time, labour and worry by employing large contractors is so great that the officers of the department have every inducement to encourage them. But when it comes to the point, it is found that large contractors, unless unprincipled men who look to their profits from 'scamping,' are by no means ready to accept the ordinary departmental rates. A little consideration will show that this must be expected. The employment of contractors entails a double establishment, the extra cost of which must come out of the rates. Then there is the contractor's profit and his percentage for risk, a heavy item when works extend over several years, and prices are steadily rising. The advantages of the contract system, we believe, out-weigh the apparent increase of cost,—apparent, because between the saving of time on the one hand and the probability of 'revised estimates' on the other, the ultimate cost of working departmentally is probably the greater. But the fact that responsible contractors will not generally accept the departmental rates without a percentage added, shows conclusively, we submit, that those rates cannot be excessive.

Upon the third charge we join issue. Much bad work was doubtless done in former years, and here and there officers who have been placed in positions for which their previous training and natural aptitude have not fitted them, still exhibit the failures which might be expected. But there has been a vast improvement in the last ten years in the style of work generally, as will be admitted, we think, by any candid person who has had the opportunity of travelling much in the mofussil. It should be remembered that for one bridge which fails and brings down the crushing condemnation of local correspondents, fifty stand and are never heard of. That the existing system ties down the engineers too much to the desk, and prevents their giving so much personal care to their work as they should, we have already stated. Some bad work may probably be laid to this cause, but we believe the majority of failures are due to the circumstance we have hinted at; the sacrifice of the requirements of the service to personal claims, by the employment of individuals whose professional attainments would not qualify them for engineering duties in any other part of the world.

Upon the fourth charge—the supposed excessive cost of supervision—much misapprehension seems to prevail. We altogether deny that the cost is large to begin with, and we doubt whether the attempts which have been made of late years to reduce it have not resulted in a pecuniary loss to the State. The proportion of cost of establishment to total outlay is about $6\frac{1}{2}$ per cent ; but this includes all officers employed in surveying and designing new works, the expenditure on which is almost nothing, the cost of the vast number of officers, accountants and clerks, required to prepare the elaborate accounts—a luxury which must be paid for if it is to be enjoyed—and a number of officers whose duties belong as much to the military as to the Public Works Department, *viz.*, those employed in cantonments, who are really a part of the Divisional or Brigade staff. When we consider that in England an engineer or architect is paid five per cent on the cost of the work for design, estimates, and general superintendence alone, besides the expense of the contractor's staff (which is included to a very large extent in the Indian departmental establishment) and when we take into account the disparity in the cost of professional labour between the two countries, we shall see that the Indian staff is really very cheap. An English contractor's agent, receiving £1 a day and supervising 1,000 skilled artizans at 5s. a day each would show a percentage of 0·4. In India the same agent would be paid £3 a day, while his workmen would only get 1s., so that the percentage would be 6·0, or fifteen times as much.

The truth is, that comparisons between the proportionate cost of supervision in India and in England or other countries are fallacious, because the conditions are altogether different. Nor is it of any use to look at the percentage absolutely, and talk of its costing “four annas to spend a rupee,” as if the mere statement of the fact were its condemnation. There are some departments, such as the survey, in which it probably “costs fourteen annas to spend a rupee,” or, in other words, the establishment forms seven-eighths of the whole expenditure, but nobody thinks of making this a reproach against them. A large number of Public Works officers are paid solely for the maintenance of roads, canals, barracks, or what not ; the lower these officers can keep the repairs, the better servants are they to the State ; but, according to this notable percentage test, the lower the repairs, the more annas it costs to spend a rupee, *i.e.*, the more inefficient are the engineers !

The direct and immediate result of cutting down supervision is to increase the cost of work, or to deteriorate its quality. It is notorious that the works carried out by non-professional agency, through Tehsildars, &c., are of the most inferior description; bad designs, bad workmanship and bad materials. Usually after a few years of heavy repairs the work has to be re-built at a great waste of public money; yet the Public Works Department has been actually told to 'emulate' the civil officers' works in their low percentage of establishment!

The only cases in which this test can usefully be applied are where the conditions are similar. Thus we may fairly compare two working railways as to their percentage of establishment to traffic receipts, or two running canals as to their percentage of maintenance *plus* establishment to original cost. In the latter case the proportion of establishment alone to cost of works, or cost of maintenance, is no test of efficiency; because the establishment may be low and the repairs high, or *vice versa*; to judge of the management of the work, we must take the two items together.

So we may, with due attention to comparative rates and many other particulars which affect the result, compare the proportionate cost of supervision on new works, which are being carried out under similar circumstances. But to take one province in which expenditure is chiefly on repairs, and compare it with another where the bulk of the work is under construction, or to neglect the consideration that in some provinces work is much scattered, in others concentrated at a few principal points, and then to draw inferences as to the relative efficiency of the management is altogether a misapplication of ingenuity.

The Public Works Department has a grand field before it; and the Government of India has an opportunity on a scale which rarely indeed occurs, of winning renown and removing the old reproach against the British nation, that we cannot organize. Seldom does it fall to the lot of a Viceroy to leave behind him such a definite, solid, beneficent and enduring memorial, as the creation of a thoroughly satisfactory and efficient system of Public Works would enable Lord Mayo to bequeath. Nor would the effects of success be confined to India; they would encourage the Home Government to pursue that policy of State organization towards which even the conservative English are visibly inclining. The democratic theory of the State, so

long cherished by Continental radicals, has received a vast impulse from recent events in America, which have taught that mighty nation of Anglo-Saxons to subordinate the individual to the Union. The influence has spread to England from East and West alike; there is a growing impatience of weak governments and the *laissez-faire* principle which virtually died with Lord Palmerston. The sticks themselves are beginning to ask to be tied up in a bundle. The working men, educated by their Trade Unions, know that *they* at any rate can organize; they wait to see whether their hitherto rulers can govern, as well as reign; and if a failure ensues, they may make an 'ugly rush' to try their own hands. Certainly, the 'upper classes' have as many opportunities as they could wish just now to demonstrate their capacity. Well used, these opportunities may establish them more firmly than ever in the leadership of the nation, but it is a serious truth—as in England, upon Ireland, upon education, upon State management of communications—so in India, upon finance, upon the land question, and upon Public Works pre-eminently, *the governing classes are on their trial.*

ART. III.—A SKETCH OF THE WAHHABIS IN INDIA
DOWN TO THE DEATH OF SAYYID
AHMAD IN 1831.

FOR some time past the Muhammadans of Bengal have attracted a good deal of public attention. Articles of the *Pioneer* have been reprinted in the *Englishman* and in the *Doorbeen*—the only Calcutta paper representing Muhammadan interests, and answering articles in the *Doorbeen* have been laid before the European public in the *Englishman* and *Pioneer*.

But whilst the English and Muhammadan papers are urging on Government the necessity of raising Muhammadans from their present fallen condition, and of assisting them to obtain their fair share in the government of the country, the Hindu community comes forward, and bids the public remember that there is a well-defined class of disloyal Muhammadans, and that it is still unknown how far they carry with them the sympathy of the whole Muhammadan community. In the *Hindoo Patriot* of the 2nd of August last there is the following passage:—

“Such sects as the Ferazis and the Wahhabis, even if impotent themselves for a great movement (which, however, we do not believe), are dangerous as the ever-ready nucleus, round which may gather all the discontents and hates and ambitions which must, under the most favourable circumstances, be inseparable from such a large and heterogeneous empire of many and conflicting elements, and which under the present not very wise, however beneficent and brilliant, rule must be numerous enough. Still worse, they may bring the foreigner into the country or pave his way to it by a variety of offices quietly performed. Our anxiety on this score is perhaps exaggerated, but it originates in our knowledge that the Ferazis, though a Bengal sect, are heard of out of Bengal, in native states where its members might be least expected, and where they endeavour to make converts among those who come within the circle of their influence, and that the Wahhabis are spread throughout India, and are in great strength in such powerful and inflammable Muhammadan states as Hyderabad and on our North-West frontier—as well as in our ignorance of the exact number and position and prospects and influence and leaders of each. There are scores of Ferazi

“villages in Bengal, but the Government and the public alike
“are quite in the dark as to them or their organization, their
“politics or their religion. This bespeaks a great neglect.
“The Wahhabis are a far more dangerous sect as one co-present
“with Muhammadanism, while the Ferazis are a local one. The
“movement, sprung at the fountain-head of Islam in Arabia,
“has spread throughout the Muhammadan world. Its mission-
“aries are as numerous and as zealous as those of Christianity,
“its teaching as inimical to the authority of infidel states
“as that of the Jesuits, and with Jesuitical reserve might be
“quite as dangerous. The Wahhabis, though deemed heterodox,
“are respected for their austerity by the orthodox who in
“presence of Wahhabi recklessness seem to be ashamed of their
“faintheartedness in keeping in abeyance some of the distinctive
“tenets of their faith. They seem even to have an organization
“like the Jesuits, preachers paid from a common fund raised
“by the laity, members of the society of settled purpose letting
“themselves quietly down in the undistinguished mass of the
“population, engaged in ordinary avocations of buying or selling
“or of ministerial work in the courts of the infidel, but never
“forgetting their real religious character or losing sight of
“their political aims, but furthering them the more efficiently
“and without notice by pecuniary contributions and making
“converts, acting in concert at long distances from one another,
“and, whether in India or in Arabia, originating and conducting
“wars. In every respect the movement is a very important
“one, having for its object the resuscitation of the political
“supremacy of Islam in the world by a return to the original
“purity of the faith and a revival of the spirit of its followers.
“We are too apt to scout the possibility of the programme, but
“we ought to remember the great and mournful lesson of history,
“that there is no guarantee of the permanence of civilization from
“any wide, extended and simultaneous outbreak of barbarism, or
“what is equally if not more terrible—fanaticism, and to know
“that Muhammadanism comprises both these destructive ele-
“ments. Even if we did not despair of the ultimate future of the
“present progress of the world, we might believe that Wahhabism,
“if allowed to gain strength within our heart, may, in concert
“with its forces on our borders and abroad, and at a suitable
“time, very much endanger the state. It behoves the Govern-
“ment, therefore, to make a searching enquiry into both the
“Ferazi and the Wahhabi sects, and such other sects with political

“ aims or aspirations both in and out of India, for among
“ Muhammadans the only political link is that of religion, whereas
“ that of race is paramount among other people. How far
“ the Ferazis and the Wahhabis have the sympathy of the rest
“ of the Muhammadans, it is impossible to say with certainty.
“ Some of their peculiar tenets may be repugnant to the orthodox
“ Musalmans, but there must be still the bond of a common
“ religion uniting both, and above all the political objects of
“ the two sects must be dear to all Muhammadaus, who, as men,
“ naturally sigh for their lost dominion, and, as acceptors of
“ an aggressive creed, believe in the duty of war against the
“ infidel, Christian or Hindu, Jew or Buddhist.”

In the present article it is proposed to answer, in part, the questions here asked, without entering into all the minute points which separate the Wahhábís from the orthodox Sunnís.

The Muhammadans of India may be roughly divided into two sects—Sunnís and Shi’ahs, the former the adherents of the Musalman religion in the form which appeals powerfully to the senses, the latter the supporters of the same religion from an intellectual, or, so to speak, rational point of view.

The Shi’ahs delight in external forms, religious processions, and outward demonstrations of piety. The Sunnis object to all such accidents of religion as opposed to their faith, and pride themselves in conforming to Muhammadanism in its original simplicity. The Shi’ahs have great faith in the efficacy of visiting holy places, and of prayers made to saints or holy men; while the Sunnís, on the other hand, attribute little virtue to such pilgrimages, and disbelieve in such intercession of saints as a means of obtaining temporal blessings. These two sects are again subdivided into numerous minor sects, each distinguished by some peculiarity in practice or doctrine. All Shi’ahs, however, unite in bitterly disliking those who hold, in whatever form, the tenets of the Sunnís; and the feeling is amply reciprocated by the latter towards the various sects of Shi’ahs. The ill feeling consequent on such religious differences, embittered as they are by the remembrance of disputes for sovereign power in the earliest times between Ali, son-in-law of the prophet, and the first caliphs, frequently displays itself in open quarrels, acts of violence, and hostile meetings between the members of both sects; religious festivals are favourite occasions for the display of rancour between the parties, and at Patna, Murshedabad and Dacca,

where Shi'ahs are numerous and perform their ceremonies with great pomp, the first ten days of the month of Muharram is an anxious time to all authorities who are desirous to prevent a breach of the public peace.

The foundations of Muhammadan faith are,—the Quran, the traditional sayings, &c., of Muhammad (*sunnat*), the unanimous decisions of doctors of theology (*ijma'*), and conclusions arrived at from decisions based on the Quran and tradition (*qiyás*).

During the lifetime of Muhammad, the Quran was the standard by which all claims were decided, and every new set of circumstances, not already legislated for, was, as far as possible, met by a new revelation. The power of transmitting the words of God was limited to Muhammad, and the revealed judgments were necessarily restricted to such matters as came to his knowledge. This defect was first perceived when envoys were sent to spread the new religion among the neighbouring tribes, who by degrees acquiesced in the rule of Islam; but it was only after the death of Muhammad, when his followers extended their rule over countries whose inhabitants differed in manners and customs from the Arabians, that the insufficiency of the Quran as a code of law appeared in a striking light, and the traditional sayings, &c., of the prophet became important as a guide in forming correct decisions.

The practice of recording and collecting the acts and sayings of the prophet did not arise before the beginning of the second century of Hijra, and continued through those troubled times in which the successors of Muhammad contended with each other for supremacy. The collectors, undoubtedly devout and honest men, were guided in determining the authenticity of tradition by divine inspiration and the character of the persons through whom the tradition descended. Internal evidence as to the probability or otherwise of any tradition was never admitted, and any suggestion as to the reception of such evidence, no doubt, would have been considered presumptuous, if not impious, by the people of those times. Every tradition, however improbable, if received through God-fearing men, was recorded as genuine, whilst those descending through persons weak in the true faith were rejected. There was no investigation as to how much of any tradition was due to Muhammad, and how much was the unconscious additions of the different narrators; nor were the circumstances connected with the origin and subsequent

transmission of each traditional act and saying of Muhammad enquired into.

As might be expected from a mass of oral traditions, collected in a manner which necessarily led to the fabrication of stories, the accounts of Muhammad's actions which are recognized as genuine, are sometimes difficult to reconcile with one another, and are sometimes flatly contradictory. Such discrepancies and contradictions, however, far from throwing doubt on the truth of these traditions, only confirm true believers in the faith. Variations are looked on as a proof of the far-seeing wisdom of Muhammad in not confining his followers to one narrow way of salvation, while patent contradictions are viewed as a necessary result of the Muhammadan law as first expounded, being afterwards modified and abrogated by later utterances of the prophet. Thus it appears that Muhammad prayed in a different manner at different times. Sometimes he raised his hands to his ears only once, sometimes more than once. At one time he commenced his prayers by saying '*bismillah*' in a loud voice, at another he repeated it to himself.* His companions, anxious to imitate him, prayed exactly as they saw him pray, and handed down these differences to the next generation.

Between the end of the first century of Hijra and the middle of the third, no less than four celebrated expounders of Muhammadan law flourished, who held different views as to the degree of credibility to be attached to certain tradition, and each became the founder of a new sect of Muhammadans.

1st—Abú Hanífa, who was born about A.H. 80, and died about A.H. 115. He founded the Hanfi sect, which includes almost all the Muhammadans of India.

2nd—Abu Abdullah Sháf'í, who was born about A.H. 150, and died about A.H. 204. He founded the Shaf'í sect.

3rd—Málik, who was born A.H. 95, and died A.H. 179. His followers are called Málikis.

4th—Ibn Hanbal, born A.H. 144, and died A.H. 241. He founded the Hanbali sect, which is very numerous in Arabia.

The founders of these sects were undoubtedly pious men, and well versed in the laws of their religion. Each, after mature deliberation, holding that certain portions of the law should be interpreted in a certain manner, and that some traditions were

* These points are mentioned, as it will be seen further on that the Wahhabis seceded on them from the Hanfis.

stronger than others, acted according to his convictions, and promulgated his views. The result was a conflict of opinion on trivial, as well as important, points. Thus Abu Hanífa was of opinion that, according to the weight of tradition, '*bism-illah*' should be said in a subdued voice at the beginning of prayer, that the person praying should only raise his hands to his ears at the opening of prayers, and that during prayers the hands should be crossed below the breast; whilst Shafí held that '*bismillah*' should be said in a loud voice, that the person praying should raise his hands to his ears at different times during prayer, and pray with his hands clasped across his breast. Again Abú Hanífa maintained that a man, though absent and unheard of, is not considered dead until ninety years have passed, and a second marriage by his wife during that period would be illegal; whilst on the other hand a follower of Málik, according to the views of his master, would be justified in marrying after the lapse of four years.

These four sects of the Sunnís are looked upon, not as separate religions, but as different branches of the one true Muhammadan faith. The members of each sect are bound to follow the forms and ordinances of its founder,* and to believe that by so doing they will obtain salvation. The rules of each sect are perfect in themselves; but conversion from one sect to another, is rarely allowed, and even when justifiable, is looked on with disfavour. Conversion is only allowed to persons placed in trying positions, and when the difference between the sects is of extreme minor importance.

From this it will be seen that Muhammadans as a body are not allowed the right of private judgment in matters of religion. They are not forbidden to read the Quran or books containing traditions of Muhammad, but beyond this they cannot advance, nor interpret them in any way inconsistent with the opinion of the sect to which the reader belongs. And yet the fact that the founders of these sects arrived at different conclusions is a proof that they at least exercised such a right, and

* The relation is expressed by the words "*taglid karna*" (to imitate) "*mugallad*" (imitated). The members are said to be "*mugallad*" in distinction to those who, like Wahhabis, do not venerate the four Imams, and are called "*ghair mugallad*."

That traditions were fabricated, there can be no doubt. Bokhan, out of 60,000 traditions collected by him, considered only 4,000 authentic, and Abu Daud arrived at a somewhat similar conclusion.

did not follow the teachings of other doctors, so that the doctrine of private interpretation is more properly expressed by saying that persons who may attain the rank of doctors of law must act on their own judgment and cannot follow other doctors, but that the mass of Muhammadans are bound to abstain from private interpretation, and to conform to the way of one or other of the four Imams. We shall see hereafter that this was one of the first points assailed by the Wahhabís.

The term 'Wahhabí' is only properly applicable to a body of Arabian Muhammadans, and is derived from the name of the founder of the sect, Shaikh Abd-ul Wahháb, who was born before the beginning of the last century in Najd, a province of Central Arabia. He was educated in the schools of Busrah, and afterwards becoming a travelling merchant, visited Damascus, all the chief towns on the shores of the Persian Gulf, and even Persia. After many years' wandering he at last returned to Arabia, and, settling down at Deraiyah the capital of his native province, began to preach reform and promulgate his peculiar doctrines. He urged that Muhammadans should conform to the religion as it existed in the lifetime of the prophet and during the caliphate, that every true believer should place implicit reliance in the one Supreme Being and in Him only; should avoid undue exaltation of Muhammad or any other saint as derogatory to God's dignity; that all forms, ceremonies, and observances which had arisen since the time of the prophet should be repudiated; and finally that, as in the infancy of Muhammadanism, the religion should be promulgated by the sword.

His doctrines were adopted by Shaikh Muhammad Ibn Saud, a chief of Deraiyah, who became his disciple and married his daughter. About the middle of the last century Abd-ul Wahháb died. He was succeeded by his son Muhammad, and under his guidance Muhammad Ibn Saud became the ruler of Central Arabia; since then the Wahhabí kingdom has suffered many changes of fortune, an account of which is, for the purposes of the present article, unnecessary.

In the beginning of the present century, the Wahhabí doctrine appears to have been carried into India by the numerous pilgrims who visited Mecca. So much is certain that about this time one Haji Shariyatullah, a native of Farídpur and father of the celebrated Dudu Miyan, promulgated similar doctrines in Lower Bengal. From various causes his followers, who are called "Feraizis," have exercised but

little influence in India ; but the result of the teachings of Shariyatullah shows that the people were prepared to accept the tenets of Sayyid Ahmad, a native of Hindustan, whose doctrines require more detailed examination on account of their historical importance.

Sayyid Ahmad was born in the month of Muharrum 1201 Hijra, at Roy Bareilly in the province of Oudh. Little is known of his first years, but he appears to have left home at an early age, and taken service in the army of Amir Khan Pindari, who afterwards became Nawab of Tonk. His position in the army is disputed, but it may be concluded from the silence of his followers that he never obtained any important command. Some time before the troops of Amir Khan were disbanded in 1817,* he left Tonk and went to Delhi, where he became a disciple of the celebrated Shah Abd-ul Azíz.

At this time Shah Abd-ul Aziz was admitted to be the most learned theologian in India. His fame had spread far beyond Hindustan, and the Arabian writers gave him the title of "The Sun of India." He exercised, and even now exercises, vast influence over the Muhammadans of India. His decisions on abstruse points of theology are still acknowledged as almost infallible, and his name, which would be a tower of strength to any party, has been claimed as that of a supporter of their respective views both by Wahhabís and Sunnís. His legal opinions are quoted by both parties to sustain their position, but on the whole he appears not to have countenanced extreme views on either side, and to have been a liberal conservative (if such a term may be used). He was *mugallad*, and anxious to uphold the established position of the four Imams.

The doctrines of the Wahhabí sect in Arabia cannot have been unknown to him, and, probably influenced by them, he held that some reform was necessary among his own sect—the Sunnís. He wished to see all customs and forms which had arisen from contact with Shi'ahs and Hindus done away with ; but he went no further ; and in latter days, when the doctrines of Sayyid Ahmad's sect gained prominence, he repudiated them, and, cutting off his relatives who joined that movement, appointed a stranger as his successor. Towards the English Government, considering the time in which he lived, he was

* The exact time is not known. Part of the *Sirát-ul Mustakím*, which is said to contain his sayings, was written in 1233 Hijra, or about 1818 A.D., and he must have attained some position as a teacher before that.

somewhat liberal. He recognized the propriety of learning English and taking service with the conquerors, which is *in advance* of the opinion prevailing among many Muhammadans of the present day.

Sayyid Ahmad remained several years at Delhi, and became intimate with the family of Shah Abd-ul Azíz. His most intimate friends appear to have been Maulavi Muhammad Isma'il, his nephew, and Maulavi Abd-ul Hai, his son-in-law, both of whom were learned and devoted disciples, and remained with him until the close of his career.*

It appears from the *Sirát-ul Mustakím*, which was written in 1233 Hijra (1818 A.D.) by the latter of these learned men, and which is in effect the Quran of the Wahhabis of India, that even at that time Sayyid Ahmad considered himself bound, in pursuance of a divine revelation vouchsafed to him in a dream, to take up the position of a *murshíd*, and enrol disciples for the promulgation of his doctrines, Maulavi Abd-ul Hai and Muhammad Isma'il becoming his first converts. Their influence and position induced others to join, and after some time Sayyid Ahmad attained considerable notoriety as a teacher. The learned men who attended him paid him the greatest respect, and, contrary to his own doctrines,† they sometimes carried his palki, and sometimes ran along by the side of it bare-footed. They called him '*Amír-ul-muminín*,' '*Imam Hajam*,' '*Imam Mahdi*,' and declared that he had attained the rank of a saint and a prophet. In 1235 Hijra (A.D. 1820) he left Delhi accompanied by Maulavis Abd-ul Hai and Muhammad Isma'il, to preach reform to the people of India, and to incite them to join in a *jihád*, or religious war, against the Sikhs, who had oppressed the Muhammadans of the Punjab, and forbidden them the free exercise of their religion. In particular, they had forbidden the *azan* or calling to prayers, and this by itself is

* Abd-ul Hai was a *muqallad* Hanfi, and anxious for religious reform within the limit admitted by his uncle; but Muhammad Isma'il, who was undoubtedly the more learned, believed in the necessity of more sweeping changes. He was not a *muqallad* Hanfi, and for the greater portion of his life exercised the right of private interpretation, and, following a middle course, adopted in part both the Hanfi and Shafi doctrines. In later days he repented of his presumption and became an orthodox Hanfi, but the seed of dissension had been sown among the disciples of Sayyid Ahmad, and the result was beyond his control. His most important work, the *Sirát-ul Mustakím*, is the Quran of the Wahhabis of India.

† Paying undue respect is an offence among Wahhabis. They are all brothers.

a sufficient cause to justify a Muhammadan in rebellion. He first visited Saharanpur, thence he went to Rampur and remained with Fyzullah Khan, the chief of a numerous body of Pathans. He then wended his way towards Calcutta, visiting Gorakpur, Jaunpur, and other places, and making numerous converts on his route. He arrived at Patna accompanied by a large fleet of boats carrying upwards of 500 enthusiastic disciples, and remained there a few days. He put up first at the tomb of Mír Ashraf, and afterwards at the Maddapa mosque. He enrolled as his disciples Maulavi Wilayat Ali, Maulavi Inayat Ali, Maulavi Furhab Husain, Maulvi Ilahi Bakhsh, and his son Maulavi Ahmadullah of Sadiqpur,* and other residents of Patna. He then departed for Calcutta, but before leaving he appointed Shah Muhammad Husain, Wilayat Ali, and Inayat Ali as his caliphs or lieutenants at Patna, to enrol followers in his name, and gather supplies for the proposed war against the Sikhs. From Patna, Sayyid Ahmad travelled by boat to Calcutta, and preached at several places on the borders of the Ganges. He arrived there towards the end of 1821, and met with great success as a teacher. The people of Calcutta and Baraset flocked to him in numbers. Among those who became his disciples was Titu Mir, who afterwards, in 1831, raised the standard of revolt in Baraset. By this time Sayyid Ahmad had collected a large body of followers, and gathered a considerable sum of money as tithes. His tenets—that all innovations on the simple and primitive Muhammadan religion should be abandoned—took root, and the sums formerly expended in religious ceremonies flowed into another channel, and were devoted to a war against the Sikhs.

In the beginning of 1822, he proceeded with numerous followers to Mecca, and, after performing the pilgrimage, set out for Medina. Here the Turkish authorities were decidedly hostile, and declined to tolerate the doctrines expounded by his attendants. They had already suffered from the Wahhabis of Arabia. Some of the Maulavis were arrested on attempting to preach reform.

In October 1823 Sayyid Ahmad returned to Calcutta *via* Bombay, where he remained a few days to preach and enrol disciples. In December he left Calcutta for his home in Roy Bareilly, visiting Patna and Gwalior on the way. Here he was joined

* Ahmadullah was transported for treason afterwards.

by Shah Muhammad Husain of Patna with a large party of crescentaders. A general meeting of his caliphs was held, and permanent arrangements were made to forward supplies of men and money to support the enterprise long contemplated. It might have been imagined that such operations on the part of Sayyid Ahmad or his lieutenants would have excited the alarm, or at all events called forth the intervention, of the Government. It will be in the remembrance of all how the attempt to establish a Roman Catholic hierarchy in England some years ago created a great commotion among the people, and caused the enactment of a prohibitive penal law, although Rome did not propose to establish any temporal power in the country, nor was there the faintest suspicion of disloyalty on the part of the English Catholics; but in India, the country was parcelled out among the caliphs of Sayyid Ahmad, and an actual government inimical to British interests was organised, without the ruling authorities becoming aware of the organisation till nearly 40 years afterwards—a sad proof of their ignorance of the people over whom they rule. Sayyid Ahmad then visited Tonk, where he remained some time with his old commander Amir Khan, whose son became his disciple. Leaving Tonk, he crossed the desert, and entering Sind became the guest of Mir Rustam Khan of Kheirpur, where he was joined by some crescentaders. He then entered the hills on the north-west frontier, and began to preach a *jihad* against the Sikhs among the mountaineers of Kandahar and Kabul. Meeting with little success, he proceeded to the Ghilzis' country, and towards the close of 1826 entered into the Eusofzai hills between Peshawar and the Indus.

For years the Eusofzai tribes had seen the Sikhs snatch one province after another from the Afghans, and were anxious about their own independence. In 1823 Yar Muhammad Khan, the governor of Peshawar, agreed to pay tribute to Ranjít Singh; but this was disapproved of by his brother Muhammad Azim Khan who drove him out of Peshawar, and proclaimed a religious war against the Sikhs. In March an indecisive battle took place at Nowshera between the Sikhs and the hill tribes; but the latter, abandoned by their leader Muhammad Azim Khan, dispersed. The Sikhs took Peshawar and plundered the country up to the Khyber; but perceiving the difficulty of ruling it direct, gave it in fief to Yar Muhammad Khan.

The Eusofzai tribes, anxious to preserve their independence and desirous of humbling the Sikhs, received Sayyid Ahmad with open arms, and acknowledged his authority. Aided by them, he attacked a body of Sikhs at Akora, and, though repulsed, was allowed to retire unmolested. By degrees his power increased, and Yar Muhammad Khan entered into an agreement with him to acknowledge the independence of the Eusofzai tribes. Matters remained in this position till 1829, when Sayyid Ahmad advanced on Peshawar giving out as his reason for resuming hostilities that Yar Muhammad Khan had attempted to poison him. A battle ensued, in which Yar Muhammad was slain and his followers routed. Peshawar was only saved by the presence of a Sikh force under Sher Singh and General Ventura. In June 1830 Sayyid Ahmad attacked a Sikh force under General Allard, but was defeated; soon after he marched against Sultan Muhammad Khan, who had succeeded Yar Muhammad in Peshawar, and succeeded in driving him out of the country and in obtaining Peshawar. This temporary success was ultimately a great benefit to the Sikhs. Sayyid Ahmad had succeeded as an invader and attained the position of a governor, and his fanatical rule resulted in the destruction of the sect as a temporal power. His first acts were to proclaim himself an independent sovereign under the title of caliph, and to coin money in the name of "Ahmad, the just defender of the faith, the glitter of whose sword scattered destruction among infidels;" and, following in the steps of the Arabian Wahhabis, he demanded from his subjects the legal tithes as paid in the time of Muhammad and the caliphs. At this time an attempt was made to enlist the orthodox Hanfis of Peshawar on his side. A large meeting of the learned Muhammadans was held, and mutual concessions were made. Maulavi Isma'il relinquished the right of private interpretation, abandoned "*raf'i-yadain*," and became a *muqallad* Hanfi, whilst the Hanfis acquiesced in the doctrine of *bida't* and *shirk* promulgated by him, and agreed to pay the legal tithes to Sayyid Ahmad as a warrior in the cause of religion. The fanaticism of the reformers soon broke forth. As the descendants of Abd-ul Wahháb had desecrated the grave of the prophet at Medina, so the followers of Sayyid Ahmad began to raze the tombs in Peshawar; and, in accordance with the desire of promulgating religion by the sword displayed by the early Muhammadan conquerors, they declined to live at peace with the neighbour-

ing Hindu power. The doctrine that he who does not take a hostile part against idolatry is himself an idolater, was strictly enforced. The Punjab was designated the *dār-ul-harb* or enemy's country, and a religious war for its conquest was proclaimed.*

The government of the fanatics had from the beginning little chance of success. It was an attempt to strike twelve centuries out of the world's history, and compel a foreign race to conform to the habits and customs of the Arabians in the time of Muhammad. The people, in spite of their religious devotion, soon became discontented, and accused Sayyid Ahmad of giving maidens of the hill tribes in marriage to his Indian followers. In November 1830 he was compelled to give up Peshawar to Sultan Muhammad Khan, who agreed to pay him tribute. He then crossed to the left bank of the Indus to conquer the Sikhs. He carried on a desultory war without any success for some time, and in May 1831 he and his followers were surprised and routed by a Sikh force at Balakot. Sayyid Ahmad and Maulavi Isma'il fell in the action.

Before going further, it may be advisable to give a sketch of Sayyid Ahmad, the doctrines which he went forth to preach, and the causes which led to their reception. When he visited the Lower Provinces in 1820, he was about 36 years old. His figure, a little above the middle height, was commanding, and its effect was increased by a long beard falling down on his breast. His dress consisted of a turban of white cotton, a kurta opening down the middle, and tight white trousers of the same material reaching to the ankles. Following a custom which at that time had become prevalent in Upper India, he had been enrolled in the four principal sects of faqirs in Hindustan. His demeanour was grave, quiet and kind. He seldom spoke to his visitors more than was absolutely necessary to enrol them as his disciples, and when they became numerous, as in Baraset, he adopted the plan of enrolling them by touching his unfolded turban. Taciturn, he avoided religious discussions for which his ignorance of Muhammadan law rendered him totally unfit, and when on any occasion discussion became necessary, he remained a quiet spectator, leaving the task of combating the disputant's arguments to his attendant

* About this time he addressed a letter to his followers in Bengal urging them to come and partake, and large bodies of men from Patna, Lucknow and Delhi proceeded to help him, and ultimately joined him at Balakot.

Maulavis, Hai and Isma'il. He and his followers were of opinion that in figure and disposition he resembled the prophet. He was subject to fits of ecstasy or epilepsy (which it is difficult to determine), and believed and led his disciples to believe that whilst under their influence he, like the prophet, held direct communion with God. In short he was a kind, quiet man, unlearned and subject to nervous attacks, who arrogated to himself the position of head of the Muhammadans of Eastern Asia, and supported it by the most fanciful arguments: a man who never could have attained any position as a religious teacher in any country where insanity is not confounded with inspiration.

The rule adopted by Sayyid Ahmad of abstaining from joining in religious discussions, renders it somewhat difficult to arrive at a definite conclusion as to what he really believed. Both the orthodox Sunnis, and his own immediate followers agree in considering him an exemplary man, who attained the rank of a *walí* (saint); but the former contend that he never held any heterodox views, whatever may have been the opinions of his attendant maulavis—a point which is not conceded by the latter. The only book put forward as containing his opinions is the *Sirat-ul Mustakim* written by Maulavi Isma'il, and it purports to contain the exact words of his spiritual chief. The authenticity of this book is disputed by the Hanfis of Lower Bengal, who look on Maulavi Isma'il as a man who, anxious to propagate his own views, promulgated them as those of his master, but considering the character of the writer and the corroborative testimony of other disciples of Sayyid Ahmad, the authenticity of the book seems fairly established. As might be expected from a faqir, a great portion of his teachings refer to the manner in which an enquirer may ultimately become a *walí* (saint). His scheme of religion appears to be one of absolute predestination and belief in himself. Men can accomplish nothing of themselves; their whole reliance must be placed on the deity, who, long antecedent to their existence, decreed their acts in this world and their future state. In reality, they are not free agents; but labouring under the impression that they possess a free will, they are strictly accountable for their acts. At different periods of the world's history, the Deity in his goodness has appointed Imams or leaders, whose duty it is to guide the mass of the people in the way of salvation. The prophets of old, Christ and Muhammad, were men of this kind,

but as the series of prophets ended with Muhammad, the Imams coming after him can never attain a higher rank than that of a *walí*. But this is of little importance. A *walí* is the next in rank to a prophet, as it were his younger brother. He follows step by step the path of salvation pursued by Muhammad. At times he is absorbed in the Deity and, partaking of his attributes, becomes omniscient and even capable of performing miracles. There are certain signs by which such an Imam may be known. He is a Sayyid, born in an humble position. At first his claims to the dignity of a leader are not admitted; but by degrees the proofs of his mission appear, and at last he stands forth as an Imam, acknowledged by all true believers as God's vicegerent on earth, whose mission it is to gather the faithful and guard them in their faith.

Judged by these tests, the mission of Sayyid Ahmad was too clearly pointed out to be doubted. He was a Sayyid in humble circumstances. As Muhammad saw Moses in heaven, so Sayyid Ahmad claimed to have had the privilege of holding communion with the deceased founders of two sects of faqirs to which he belonged, and as God vouchsafed to place his hand on the shoulder of Muhammad as a sign of approbation, so he also deigned to place his hand in that of Sayyid Ahmad. He was then the Imam of his period; nay, more—he was the Imam Humam. And as Muhammad was the last of the prophets, so with Sayyid Ahmad ended the order of *walís*.*

There is a tradition universally held by Muhammadans, that twelve caliphs will reign over Islam between the death of Muhammad and the end of the world, but the different sects are not agreed as to the number of caliphs who have already existed. The Shi'ahs hold that eleven caliphs have passed away, and that the twelfth, Muhammad Abul Kasím, was born about 250 A. H. They do not believe in his death; but are fully persuaded that he remains concealed in some secret place until the proper time for his manifestation as *Imam Mahdí*

* The term Imam is purely religious, and does not necessarily infer that such a person possesses any temporal power. The founders of the four orthodox sects are called the four Imams. In Muhammadan countries there is generally an Imam attached to every mosque to superintend the offering up of prayers, and the leader of any prayer-meeting is similarly styled. At the beginning of his career it does not appear that Sayyid Ahmad or his followers attached any other meaning to the title than as descriptive of his position as a religious teacher, but in a short time it was differently interpreted.

arrives, when he will appear and lead the faithful against the infidels. Among the Sunnis there are different opinions ; some hold that six caliphs have existed, others only four. There are thus at least six caliphs to govern before the end of the world, but when their rule will begin is unknown. Sayyid Ahmad claimed to be one of those caliphs, and supported his position by the following arguments. Was he not a Sayyid, a direct descendant of Ali, the son-in-law of Muhammad, and Fatima his daughter? Did not they appear to him in a dream and treat him as their own child? The one bathed him, the other dressed him in comely apparel, and what more was necessary in addition to his position as an Imam to prove his claim to the throne of the caliphs, and his right to be called Amir-ul-muminin, *i.e.* commander of the true believers, a title which was never appropriated by any other Imam among the Sunnis, but exclusively applied to the caliphs and other independent Muhammadan rulers? This idea of his mission as a caliph took firm hold of Sayyid Ahmad. In accordance with it, he first parcelled out India and appointed his caliphs to gather his legal tithes, and afterwards proclaimed his independence in Peshawar.

But as men are not born equal, every person cannot hope to attain the rank of an Imam, and consequently some general rules are necessary for the guidance of the mass of Muhammadans in matters of belief and practice. His doctrinal rules are those which might be expected from a faqir who believed he was living as Muhammad lived. Admitting the same sources of religious belief as the Sunnis, he pointed out that of these the Quran alone was free from the possibility of error ; that tradition was not inspired, but, like the opinions of Muhammad's companions and the decisions of the learned divines, was liable to error, though in a less degree. And how was the possibility of error to be guarded against? Muhammad promised salvation to those who in later times would be guided by the Quran and tradition and by them only, and so it would be safer to dispense with the decisions of his followers, however pious they may have been. To attain perfection, another elimination seemed necessary. Although Muhammad had forbidden the people of this period to act upon anything more than the Quran and tradition, yet it does not necessarily follow that tradition is to be observed. As a source of belief it is impure, worse ; still people now-a-days place it on an equality with the Quran, and the only safety is in casting it away and holding fast to the Quran. A

fair though incomplete exposition of his tenets is given in the following paragraph from his sanad,* appointing as caliph Muhammad Husain of Patna.

“In the name of the merciful God ! Be it known to those who seek the way of God in general, and to those in particular, present and absent, who are the friends of Sayyid Ahmad, that the object of those who become disciples of holy men by the ceremony of joining hands, is to secure the way of pleasing God, and depends on the observance of the law of his prophet. He who believes that the way of pleasing God can be found without observing the law of the prophet, is a false and deluded man. His pretensions are false and untenable. The law of the prophet is founded on two things :—

1st.—The not attributing to any creature the attribute of God (*shirk*).

2nd.—Not inventing forms and practices, which were not observed in the days of the prophets, and his successors or caliphs (*bid'at*).

“The former consists in disbelieving that angels, spirits, spiritual guides, disciples, teachers, students, prophets or saints remove one's difficulties ; in abstaining from having recourse to any of the above creations for the attainment of any wish or desire ; in denying that any of them has the power of granting favour or removing evils ; in considering them as helpless and ignorant as one's self in respect to the power of God ; in never making any offering to any prophet, saint, holy man or angel for the obtaining of any object, but merely to consider them as the friends of God : to believe that they have power to rule accidents in life, and that they are acquainted with the secret knowledge of God is downright infidelity (*kufur*). No true, faithful follower ought to be implicated in any one of the above dogmas.

“With regard to the second point, non-introduction of novelties in religion consists in strongly adhering to all the devotions and practices in the affairs of life, which were observed in the time of the prophet ; in avoiding all such innovations (*bid'at*) as marriage ceremonies, mourning ceremonies, the adorning of tombs, the erection of large edifices over tombs, the lavish expenditure on the anniversaries of the dead, the construction of *ta'ziyas*, and the like, and in endeavouring as far as may

* Selections from the Records of the Government of Bengal, No. XLII.

be practicable to put a stop to these practices. A man must first leave off such practices, and next invite the attention of all Musalmans to the fact, that it is as much obligatory on them to follow the law of the prophet as to obey the commandment of God, in doing what he commands to be done, and in refraining from what he forbids. Since the above is well impressed on my mind, it behoves all who seek God to place the matter before their eyes, and now by joining each others' hands to abide by it, and do so particularly with Shaikh Muhammad Husain, who has pledged to do the same by joining his hands with mine, and to whom I have fully explained all the above matter, and authorized him to take such views from you and to teach you holy practices in the room of myself. So it behoves the said Shaikh Muhammad Husain to adopt the law as above explained, to direct his body and soul to God, to follow the law in spirit and act, to shake off any dust of *shirk* and innovations (*bid'at*) that may be on him, to strive and incite people to make their vows by joining their hands in his."

Shirk and *bid'at* were to him objects of the greatest aversion. His followers were forbidden to consort with people addicted to either. They were bound to go forth and preach their faith, for the Lord had commanded. "Yet continue to admonish, for admonition profiteth the true believers" (Sale's Quran, p. 424) ; and again, "wherefore admonish thy people, if thy admonition shall be profitable unto them. Who feareth God, he will be admonished, but the most wretched unbeliever will turn away therefrom, who shall be cast to be broiled in the greater fire of hell, wherein he shall not die neither shall he live" (Sale's Quran, p. 487). Where persuasion failed, there remained the sword, the use of which was not only justified, but considered necessary. Nor must this be considered as merely empty doctrine. In the latter portion of his career Sayyid Ahmad, as we have seen, justified his preaching by razing a large tomb in Peshawar, and his followers in Patna, sword in hand, attacked a Muharram procession and destroyed the *ta'ziya*.*

* Maulavi Ilahi Bakhsh, the blind head of the Wahhabis mentioned by Mr. Tayler, Maulavi Ahmadullah his son, afterwards transported for treason, and Shah Muhammad Husain, the chief caliph appointed by Sayyid Ahmad, were kept under restraint for some time. Several others were imprisoned. The fight is said to have been rather a severe one ; even some women joined in it.

All Muhammadans agree in considering *shirk* a deadly sin, and so far the doctrine of Sayyid Ahmad presented nothing new. It was his application of the doctrine which was considered objectionable. The orthodox Hanfis considered that *shirk* was only committed when the doer wilfully attributed God's attributes to other than God, but the reformers went far beyond this and included in the term the most trivial acts. Thus God is the giver of all things (*bakhsh-dene-wala*), and consequently if the word "*bakhsh*" forms one portion of a man's name, the other portion must be some one of the 99 names of God. *Ilahi Bakhsh* is a correct name; but to name a child Muhammad Bakhsh is attributing to Muhammad one of the attributes of God, and renders the namer liable to death as an infidel in this world, and to eternal punishment in the next. Again, in prayer a person touches the ground with his forehead, hence bowing down to the ground as a token of respect is a mortal sin. Examples of this kind can be given without limit. The prohibition of *bid'at* rests on a tradition that Muhammad declared that whoever introduced any innovation (*bid'at*) in his religion would be accursed. According to the opinion of Muhammadan doctors, this tradition is interpreted in a somewhat liberal sense. They do not consider it to preclude the possibility of any modification of the customs in force in Arabia during Muhammad's lifetime, and hold that it only applies to such changes as are opposed to religion. Innovations necessary by the progress of civilization, or for the glory of Islam, are not considered forbidden. Thus one form of *bid'at*, such as learning Arabic grammar, and compiling and using Arabic dictionaries in order to understand the Quran, is absolutely necessary. Another form, such as founding schools and colleges for teaching religion, though not binding, should be adopted. Another form is harmless, such as eating better food and wearing better clothing than Muhammad. Another form is forbidden, such as placing a picture in a mosque. But this was not the meaning attached to the term by Sayyid Ahmad. Believing that he followed the prophet step by step, he laboured to make the customs of the first century of Hijra the guide for men in the thirteen. All customs, however harmless, connected in the most remote manner with religion, he abandoned unless they were in force in the time of Muhammad or his succeeding caliphs. The faithful were bound to live *exactly* like the people of that period. Excess of religious zeal, even if it sprung from the

best of motives, was denounced as sinful as a want of enthusiasm.* Nothing seemed too trivial to escape condemnation. The wearing of black, green or blue clothing as mourning; the building of masonry graves; being ashamed to ride on a camel, mule or ass; † paying more than ordinary respect to any person or being annoyed at not receiving such—were condemned equally with the greatest heresy, and liable to be put down by force or persuasion.

In addition, there were certain rules laid down, by adhering to which salvation might be attained. Every Muhammadan should become a member of one or other of the chief faqir sects in Hindustan, and bear in mind that the Lord has commanded in *Sura Mâida*:—"O true believers, fear God, and earnestly desire a near conjunction with him, and fight for his religion, that you may be happy."‡ Taking this command as a guide, it is clear that every man should strive to fear God, to gain in faith, to obtain a near conjunction with God (which is only possible by becoming a disciple of the Imam of the period or some other holy man), and to carry on a *jihad* against infidels. Each must be performed in the order laid down. A man cannot obtain faith before he fears God, nor join in a *jihad* before he finds a spiritual guide.§ Sayyid Ahmad insisted strongly on prayers, the payment of the legal tithes, and joining in a *jihad*. A soldier by profession, who for many years had shared in the successes which attended the efforts of his leader Amir Khan Pindari in Malwa, he dwelt with delight on the glories of a religious war. It raises a barrier between the infidel and the true believer, and the latter, freed from any contact with the evil habits of the former, becomes pure of heart and rapidly attains the dignity of a saint. He never wearied of praising crescentaders. They were the *naibs* of God. He urged the necessity of commencing a

* "The prophet (The &c.) drew a line and said, This is the way of the Lord. Then he drew several lines on the right and left, and said, These are all roads, and on every one of them is a devil who is calling (people) towards that road. Follow the way of God and do not walk on the other paths, else you will become divided."

† Many Muhammadans object to ride on asses, as they are used to carry criminals through the streets of Muhammadan cities when their offences are proclaimed.

‡ Sale's Quran, p. 86.

§ This order was based on a traditional saying of Muhammad, that *jihad* would continue until the end of the world.

jihad in his lifetime, and left strict injunctions with his followers and their descendants never to cease fighting for religion until the day of judgment.* The following extract from the *Sirat-ul Mustakim* gives a fair idea of the arguments used in favor of a crescentade.

"*Jihad* is a work of great profit. Just as rain does good to mankind, beasts and plants, so all persons are partakers in the advantages of a *jihad*. The advantages are two-fold; general, of which all men, even idolaters and infidels, animals and vegetables, partake; special, of which only certain classes are partakers, and partake in different degrees. In connection with the general advantages it may be said that the blessings of heaven, viz. copious showers at seasonable times, abundant supplies of vegetable produce, good times so that people are void of care and free from calamities, whilst their property increases in value, and an increase in the number of learned men are the effects of the justness of judges, the conscientiousness of suitors and the liberality of the rich; so these blessings increased an hundredfold are granted when the dignity of the Muhammadan religion is upheld, and Muhammadan kings possessing powerful armies become exalted, and promulgate and enforce the Muhammadan law in all countries. But look at this country (India), as compared with Turkey or Turkistan, as far as the blessings of Heaven are concerned. Nay, compare the present state of Hindustan† in this year 1233 Hijra (A.D. 1818), when the greater portion of it has become the *dar-ul-harb*, with the state of India some two or three centuries back, and contrast the blessings of Heaven now vouchsafed and the number of learned men with those of that period."

The special benefits of a crescentade are too numerous to mention in detail. They consist for the most part of those rewards which the Muhammadan religion promises to persons who offer up their lives in the cause of religion. One, however, deserves special mention as peculiar to the persons against whom a crescentade is

* It is said that in addition Sayyid Ahmad advised the propriety of performing the pilgrimage to Mecca, before joining in a holy war. That he did so himself is certain, and many of his followers followed his example, but there are not sufficient data to determine whether he issued such a command or not.

† In justice to him it must be conceded, that he was desirous of expending the money on the poor and his followers, and not on himself,—a point little attended to by his caliphs.

carried on. It might be supposed that, though doubtless a successful crescentade is advantageous to Muhammadans, yet its advantage to the persons attacked is more than doubtful. But such a conclusion is erroneous. Infidels as they are, living in a continual state of sin, constantly offending before God, the longer they exist in this world, the greater will be their punishment hereafter, and cutting short their lives, although it will not save them from future punishment, will assuredly diminish its severity.

The necessity of giving alms is strongly inculcated in the Quran. Alms are of two distinct kinds—legal and optional. The legal alms are called *zikat*; they are positively required by the law, and their amount, the property to which they attach, and the persons responsible for their payment, are clearly laid down. They are somewhat analogous to tithes in Europe, but differ both as to the amount and the property to which they attach. In a general way, they may be said to consist of $2\frac{1}{2}$ per cent. of the value of property enjoyed for a lunar year. The payment of these alms was strictly enforced by Muhammad, and when any tribe decided on receiving the faith, it received the teacher and the tax-gatherer at the same time. In the time of Abu Bakar, the non-payment of *zikat* amounted to treason, and was considered a sufficient cause for carrying on war against the recusants. These tithes were in fact looked upon as state revenue, and expended in relief to poor followers and in maintaining those who fought in the cause of religion. But gradually, as the Muhammadan rule spread, and other taxes and tributes imposed were found sufficient to support the government, the practice of collecting them ceased, and then payment was left to the conscience of the individual. Before the mission of Sayyid Ahmad, the payment of legal alms had long ceased to be enforced, and many religious Muhammadans devoted them to the support of faqirs, indigent students and travellers. But according to his doctrine, this system was objectionable. The legal alms were an offering to God, and must be paid in a Muhammadan kingdom to the ruling power, but when the faithful resided in a non-Muhammadan country, they were to be given to the Imam or leader of the faithful for the time being, as he is God's representative on earth. Sayyid Ahmad, considering himself the Imam of the thirteenth century of Hijra, demanded them as his right.

Such appear to have been the doctrines of Sayyid Ahmad as preached by his attendants at the time he commenced his tour in Bengal.

After he departed for the North-west, his caliphs in Bengal commenced to make strenuous efforts to support him : Patna was fixed on as the head-quarters, and Shah Muhammad Husain was acknowledged as the local chief caliph. Numerous books and pamphlets were printed for circulation, and thus fortified, this little band of fanatics went forth to urge the Muhammadans of India to unite in one body and carry on a *jihad* for the conquest of India, to gather recruits and funds for the purpose, and to insist on the claim of Sayyid Ahmad to the title of *Imam Mahdí*.

One Maulavi Keramat Ali of Jaunpur travelled through Chittagong, Noakhali, Dacca, Mymensing, Farídpur and Burrisal; Inayat Ali of Patna confined his exertions to middle Bengal and preached in Farídpur, Pubna, Rajshahi, Maldah and Bogra; his brother Wilayat Ali assisted him for a short time in Bengal, but his mission lay chiefly among the people of Central India, Hyderabad and Bombay.

All Muhammadans admit that the time of the resurrection is a secret only known to God. There are, however, certain signs by which its approach may be predicted, and many learned Muhammadans have attempted to determine for their own religion the points which Dr. Cumming has striven to solve for Christians. These signs are divided into the lesser and greater; among the former, are the decay of faith among men, the advancing of persons of low birth to the highest positions, the spread of sensuality among the people, tumults and seditions, war with the Turks, the prevalence of earthquakes and famines: among the greater signs in near proximity to the day of judgment is the coming of the *Imam Mahdí*. He will be a descendant of Muhammad's family, and his name and his father's name will be the same as that of Muhammad and his father; he will be born in Khorasan and remain concealed from the eyes of men for a portion of his career; then at last he will appear at Medina and become the ruler over Arabia. Afterwards he will re-conquer Constantinople, which will have at that time fallen under the dominion of a Christian power; but before he can accomplish a settlement of the newly acquired territories, Anti-Christ and his followers will appear, and hearing this, the Imam will return with his army to Damascus. Then Christ will descend on earth near a white tower to the east of Damascus, and leading the faithful against the enemy, will destroy Anti-Christ and disperse his followers.

The followers of Sayyid Ahmad preached that this idea of the *Imam Mahdī* was a popular error; that the Muhammadan ruler at the time of Christ will not be the *Imam Mahdī*, but merely a caliph who will re-conquer Arabia and Turkey; that the *Imam Mahdī* on the contrary will be the middle Imam, who, appearing at the expiration of half the period between the death of Muhammad and the coming of Christ, will be assisted by the inhabitants of India, and by the force of their arms will conquer the whole world. They held that the orthodox Sunnis had fixed their attention on the *Imam Mahdī* as a conspicuous leader, and paid but little heed to the other leaders foretold by Muhammad, and had thus been led away to misinterpret tradition. The Prophet had declared that, as after the death of Moses twelve chiefs had successively supported his religion and placed it on a firm basis, so twelve caliphs would appear after his death and hold a similar position with regard to the Muhammadan faith. The history of each of these caliphs is shadowed forth in tradition. They will not all be of equal rank; but each according to the position allowed him will reform religious abuses, will unite the great mass of the Muhammadan people into a compact body, and spread the religion of Islam as it existed in the days of Muhammad. One of these caliphs will be the *Imam Mahdī*. The Prophet had said, "When you see the black flags coming from Khorasan, go forth, for with them is a caliph, the *Mahdī* of God." But it is quite clear that the *Mahdī* will not appear at the end of the world, but at a time equidistant between Christ and Muhammad. The latter at one time declared that the caliphate immediately succeeding him would exist for thirty years, and that the *Mahdī* would appear sometime after; at another time he declared that as the true faith arose in his time, so it would end in the time of Christ and in the middle would appear *Imam Mahdī*.*

It was also prophesied that a race of kings would arise on

* "The Prophet (The &c.) said, "Receive glad tidings; my religion is like rain. It is not known (beforehand) whether the first or the last is the better, or like a garden which feeds a multitude for one year, and another number for another year; there is a doubt whether the first multitude is more numerous or better than the second; that religion will not be destroyed of which I am the beginning, *Mahdī* the middle and Christ the end."

the ruins of the caliphate* immediately succeeding him, who, abandoning themselves to worldly pleasures, would corrupt religion and allow the people to fall away from the high standard of the caliphate, and that in the course of time this race would be deprived of all power by a powerful race of tyrants, under whose rule the faithful would be sadly harassed and oppressed. The heavens would refuse rain, the earth herbage. Then a poor people† would issue from a country to the east of Khorasan, and, entering the hills, would devote themselves to war against the tyrants in the cause of religion. Before this time the *Mahdī* would be born. During his childhood he would remain concealed; but when this people had conquered some territory, he would appear and be acknowledged as their chief. He would then conquer India,‡ and turning westwards would overrun Persia, and not stop

* "The Prophet (The &c.) said, Now after me will be caliphs, and after caliphs amirs, and after amirs kings, and after kings tyrants. Then will arise a man of my house, who will restore the justice which was lost through tyranny, and gain dominion, &c." And again: "The Prophet (The &c.) said, The rule of the prophet will last among you as long as God pleases, and when He will take it away, a caliphate similar to the rule of the prophet will arise and last as long as God pleases, and when He will take it away, a pernicious government (*badshahat*) which will arise and remain as long as God pleases, and when He will take it away, a tyrannical government (*badshahat*) will arise and remain as long as God please, and when He will take it away, a caliphate similar to the rule of the prophet will arise."

† "The Prophet (The &c.) said, Verily, God has on my account chosen my people until the end of the world, and verily after me my people will meet with a great misfortune and be driven to and fro until a people from the East will come with black flags, and beg, and the people will not give them anything, and then the Easterns will fight, gain a victory, and will be offered what they desired; but they will not agree, and will give possessions of the conquered country to a man of the family of Muhammad, who will restore that justice to the earth which had disappeared through the tyranny of tyrants. Whosoever among my followers knows of this must join those Easterns, though he walks to his knees in snow." And again: "The prophet (The &c.) said, A people will come out of the East who will give a home to the *Madhi* who will rule over the east."

‡ "The Prophet (The &c.) said, I have promised all a *jihad* in Hindustan, and when it comes, offer up your lives and property. If you are killed, you will become exalted martyrs, and if you return, you will be released from hell-fire." And again: "The prophet (The &c.) said, The Lord has given salvation to two bodies of my people, that which will carry on a *jihad* in India, and that which will appear with Christ."

until he planted his victorious standard on the walls of Jerusalem.*

All the signs attending the coming of the *Madhi* evidently pointed out the 13th century of Hijra as the time of his birth. The power of the kings of Delhi had fallen before the Mahrattas, a Hindu race. Central India was in a disturbed state; the Sunni Muhammadans of Oudh and Bengal, long ruled by Shi'as, had become lax in their religious observances, and had adopted many Hindu customs.† Later, the East India Company, a Christian power, under the management of Lords Wellesley and Hastings had become supreme in India, and extinguished the hopes of the Pathan freebooters in Malwa; and lastly, the Sikhs had forbidden the *azan* in the Punjab. On every side there were signs of the fulfilment of prophecy. The time of the *Mahdi* appearance had arrived, and of Sayyid Ahmad's claims there could be no doubt. He was a Sayyid, a descendant of the family of Muhammad. His name was Ahmad, and from the gospels it appeared that Ahmad and Muhammad are the same name.‡ He was born in 1201§ A.H., the beginning of the 13th century of Hijra, and gained a reputation as a teacher. In disposition he resembled the Prophet, and his early days were passed in obscurity. He had entered the hills to the east of Khorasan with a body of people to wage war against the non-Musalman rulers of India.

The conclusion to which the followers of Sayyid Ahmad came, is more than questionable. They had arrived at it in the most arbitrary manner, by grouping together those portions of tradition most favourable to a preconceived conclusion, and yet it

* "The Prophet (The &c.) said, When you see the black flags coming from the direction of Khorasan, join them, for verily among them will be the *Madhi*, the caliph of God." And again: "The Prophet (The &c.) said, Nothing shall be able to stop the black flags which shall issue out of Khorasan, until they are planted in Jerusalem."

† A great many of the marriage ceremonies among Muhammadans have been adopted from the Hindus. In Behar, some families are partly Hindus, partly Muhammadans.

‡ "And when Jesus, the Son of Mary, said, O children of Israel, verily I am the Apostle of God sent unto you, confirming the law which was delivered before me, and bringing good tidings of an apostle who shall come after me and whose name shall be Ahmad." Sale's *Quran*, p. 449.

§ "The Prophet (The &c.) said, Verily God will bring forth out of my sect, at the beginning of every century, a man who will revive its faith.

did not satisfy some portions of tradition that were too clear to admit of a second meaning. The prophet had declared that the name of the father of the *Imam Mahdí* would be the same as that of his father, and that he would be the ruler of Arabia. The former, the followers of Sayyid Ahmad rejected; the latter, they contended without reason, was not inconsistent with their belief. There were, however, many extraneous circumstances which tended to give it a favourable reception. The Muhammadans of India saw the decline of their own people as a political power, and the wars in Asia Minor were not unknown. They longed for peace and the supremacy of their rule, and saw no other means of obtaining them than the coming of the *Imam Mahdí*. Many Sunnis declared that he would appear in the 13th century of Hijra (1786-1886), and the Shi'as, assuming greater accuracy, had foretold his coming in 1260 A.H. (1844 A.D.) But years passed by, and the conquest of Constantinople by a Christian power—a condition precedent to the coming of the Imam—did not occur, and their hopes of his coming became less. On a sudden Sayyid Ahmad appeared. His appearance satisfied some of the necessary conditions, and his right to the position of the *Imam Mahdí* was acknowledged by the multitude who possessed little knowledge of tradition; but to the honour of the educated Muhammadans of the Bengal Presidency, they steadfastly resisted these pretensions.

Pious forgeries were committed to support his claims; notably the following *qasída* :—

“ I see the power of God, the state of the world.

I do not see by astrology, but by inspiration.

I turn my eyes towards Khorasan, Egypt, Syria, Persia; I see
tumults and wars.

There will be many changes in the world; of the thousands,
I see one.

I listen to a very wonderful story.

I see distress in this world;

On all sides I see great armies fighting and plundering.

I see low-born people learned in unprofitable learning, wearing
the garb of the priesthood.

I see the decline of virtue, the increase of pride.

I see the friends of the chief men of every nation dishonoured
and fallen.

Each will twice obtain service, lose it, live in want and
again obtain service.

I see disputes and wars between the Turks and Persians.
 I see people of every rank fraudulent, knavish and deceitful.
 I see beautiful countries deserted by the pious become the
 abode of the wicked.
 One place full of happiness will remain high among mountains.
 Though I see all this, I do not despair, as I see One the
 Dispeller of sorrow.
 After many years have passed, I see that the earth will
 become beautiful.
 I see in Syria a king learned and of great repute.
 Different from the present time, I see days as it were in a
 dream.
 I see that after 1,200* years have passed, wonderful events
 will occur.
 I see the mirror of the world's happiness eaten with rust,
 sullied and covered with dust.
 I see the innumerable oppressions of the oppressors.
 I see all over the world quarrels and feuds, oppression and
 misery.
 I see masters reduced to slavery, and slaves raised to the rank
 of masters.
 I see people now at ease in misery and trouble.
 New gold coins will be struck deficient in weight.
 I see all the kings of the earth arrayed one against another.
 The moon will be darkened, and the sun will lose his strength.
 I see the traders of distant countries in danger on their journey.
 I see the Hindus in an evil state.
 I see the Turks oppressed.
 I see the trees withered and without fruit.
 I see the necessity of unanimity, patience and reserve.
 Do not sorrow, I see a friend approaching.
 When the winter disappears, the spring shining comes basking
 in the full glory of the sun.
 After his efforts have been successful, and he departs this life,
 I see his son bearing in mind his father.
 I see the reign of the son.
 I see him a person of illustrious descent, the king of the
 whole earth.
 In form and disposition he resembles the prophet.

* The original poem gives 750 Hijra. The fabrication was made to suit the birth of Sayyid Ahmad.

I see that he is learned and grave.
In his hand, I see a dazzling sword.
I feel the fragrance of the flowers in the garden of faith.
I see the flower of religion in the hands of friends.
O brother, this king will reign forty years.
I see the sinful in disgrace, avoiding the gaze of the sinless
Imam.
A Ghazi, he is the friend of those who slay their enemies ;
he loves them and approves of their deeds.
I see true religion and the glory of Islam strong and powerful.
I see the treasures of Nushirvan—the riches of Alexander.
Then the Imam will appear and rule over the earth.
I see and read A.H.M.D. * as the letters shadowing forth
the name of this ruler.
I see the path of religion will be smooth and the world fertile.
I see that through him the world will be rendered happy.
I see Mahdí and Jesus, each king of his own time.
I see the whole world becoming a second Egypt.
I see like a bulwark its just administration.
I see seven viziers under the king, all able persons.
I see God granting blessings to all.
I see the swords of hard-hearted persons lying rusty in
their sheaths, blunt and useless.
I see the hyena and the sheep, the tiger and deer, living
together in peace.
I see the Turkish troops sitting quiet, and their enemies idle ;
And I see Niyamatullah apart from all others in a place of
retirement."

Such appears to have been the nature of this extensive revival, of which the English Government of the time appears to have known nothing. Indeed, as far as can be judged from the published records, the Government has up to the present time no idea of Wahhabi doctrines. In the official report compiled by Mr. Ravenshaw, page 127, it is said :—" The followers " of Sayyid Ahmad, although commonly known as Wahhabis, " ignore the appellation ; and if questioned, assert that they are " Hanfis ! They are closely allied to the well-known Ferazi " sect, who are perhaps more orthodox Hanfis. The difference

* The poem has been changed here. In the original it is M.H.M.D., or Muhammad ; but the followers of Sayyid Ahmad changed it, to suit his name, into A.H.M.D.

“ appears to be that the Ferazis assert Sayyid Ahmad to be a good man, but not an Imam or Prophet, and that he is dead. Wahhabis and followers of Sayyid Ahmad, on the contrary, declare him to have been an Imam, and that he stated, when present with his disciples, that he would disappear and return after some years : they deny that he is dead. Among the more illiterate Wahhabis there appears to be some confusion between Sayyid Ahmad and the *Imam Mahdi* expected by all classes of Muhammadans to appear before the Resurrection and day of Judgment ; and this error, though denied by the more educated Wahhabi Maulavis, appears to have been fostered indirectly by them with a view to excite the religious zeal of their disciples, in expectation of victory over infidels and worldly dominion and power, general spread of the pure Muhammadan faith, and ultimate enjoyment of Paradise.” The books of the Maulavis, which were most carefully concealed from the authorities, leave no room for doubt as to their opinions. Mr. Ravenshaw seems to have overlooked the following passage from the translation of the annals of Muhammad Jafir,* given at page 147 of the Report :—“ I am the immediate disciple and follower of Maulavi Wilayat Ali Shahid (martyr) of Azimabad of the family of Sayyid Ahmad Shahid through Munshi Tufasil Ali ; up to this moment my belief is in Sayyid Ahmad Sahib, the middle *Mahdi*, and I believe that he is alive, according to the traditional saying (*hadís*) that whosoever dies without acknowledging the Imam of the time dies in ignorance. I regard as reprobates all who deny the Imamship of the Sayyid Sahib. May God lead sinners to the right path, and may the light of manifestation of the Imam surround them therein.” But indeed this doctrine of the sect appears to have been long ago pointed out by Dr. Herklots of Madras in the *Qanún-i-Islam*. At page 259, evidently referring to the same sect, he states :—“ The *Ghair-Mahdi* erect, each in his own district of the town, a *Jamá'at-khana* (meeting house), where on the night of *Lailat-ul-qadr* they assemble, read *dogána* (two *rakat*) prayers in the name of *Mahdi*, after which they call out three times these words : *Allahu ilahuná Mahammadu-n-Nabiyyuná al Quránu w-al Mahdí*

* Muhammad Jafir was the most trustworthy agent in the North-west. He lived at Thanessur, and passed on recruits and money to Muhammad Shafr. He was convicted at Umballa, and sentenced to transportation for life.

“ *imanná wa saddagná* ; i.e., God is Almighty, Muhammad is
 “ our Prophet, and the Quran and *Mahdí* are just and true ;
 “ and conclude by saying, *Imam Mahdí* has come and is gone ;
 “ whoever disbelieves this is an infidel. On hearing which,
 “ the Sunnis become so enraged, that they first get boys to
 “ pelt them with stones as if in sport, and then attack them with
 “ swords. The adversaries, on the other hand, considering it
 “ martyrdom to die on such a night, stand up in self-defence at
 “ the risk of their lives. For the above reason this inveterate
 “ hatred continues to exist between these two classes of people
 “ to this very day, and numbers of lives are in consequence
 “ annually sacrificed. The author has himself been present at
 “ two or three of these bloody battles, but has never seen the
 “ *Ghair-Mahdis* come off conquerors. He has also remarked, in
 “ confirmation of a common report, that their dead invariably fall
 “ on their faces. When people bring this circumstance to their
 “ notice, saying that their falling in that position arises from
 “ their unbelief, they reply : Not so, our corpses are in the
 “ act of *sijdah* (or prostration in devotion). The real origin
 “ of their enmity is this : The Sunnis and Shi’as expect the
 “ coming of *Imam Mahdí*, while the *Ghair-Mahdis* consider
 “ Sayyid Muhammad of Jeonpooree (Jeypur ?) * to have been
 “ *Mahdí*, and assert that he has been on earth, and is departed,
 “ and will never return ; and they venerate *Mahdí* as highly
 “ as they do the Prophet (the peace ! &c.), and say, whoever
 “ denies him is undoubtedly destined for hell. On that account
 “ they are called by others *Ghair-Mahdí* (without *Mahdí*), while
 “ they name themselves real *Mahdí-wale*, or *Dáira-wale* ;
 “ and denominate others by the appellations *kafir* (infidel), or
 “ *Dastagír-wale* : by the latter, because they themselves place
 “ no faith in Pír-i-Dastagír. The generality of *Ghair-*
 “ *Mahdis* are of the Pathan tribe ; but their number is so
 “ small in comparison to the Sunnis and Shi’as, that this adage
 “ is quite applicable to them, ‘as salt in wheat flour.’ ” †

Every argument which appealed to the interest, the vanity
 or the bigotry of an ignorant people, was brought to bear on the
 peasantry of India to induce them to join the movement. They
 were told that they were the Eastern people chosen by God to
 conquer the world, that afterwards under the rule of Sayyid

* Or, more probably, Jaunpur.

† The extract above is taken from the edition of 1832, but the spelling
 has been somewhat altered.

Ahmad they would live in peace and happiness. All Muhammadans would be on an equality, and there would be an end of worldly distinctions. Famines would cease, and want would be unknown. The heavens would send forth copious showers, and the earth would be covered with herbage. Again, a *jihad* in India had been distinctly foretold, and Muhammad had directed his followers to support it with their lives and property. Those who died in the war would obtain the rank of exalted martyrs, and those who survived were sure of salvation. Neither were the Maulavis backward in pointing out the punishment of the indifferent. They were destined to die in sin, and suffer the punishment of unbelievers.

The people of the North-West furnished the greatest number of recruits. In the Deccan the people were stirred up to such a pitch of religious enthusiasm, that the women are said to have sold their jewels and devoted the proceeds to support the movement. The Bengalis were somewhat backward at first: of a timid nature, and longer under the influence of a fixed Government than the people of the North-West, they furnished fewer recruits. But in the course of time their intellectual superiority prevailed, and the movement became to a great extent a Bengali-Muhammadan revival.

The mission was on the whole successful. It was adapted to meet the wants of all classes. The warrior could obtain the rank of a martyr, and the peaceful man could secure salvation by donations. Unquestionably, one great reason of its favourable reception by the mass of the people was, that the Maulavis preached equality and religious unity. They taught that every Musalman should look on another in the light of a brother; that the outward forms of respect shown to persons in position of authority and power determined among Muhammadans were innovations on the Muhammadan religion as it existed in the time of the prophet, and as such ought to be abandoned; that every Muhammadan, whatever his rank, should be content with the usual form of salutation *salám 'alaikum*; and that to non-believers, whether Hindus or Christians, no respect should be shown.

The conquest of Peshawar by Sayyid Ahmad quickly spread over India. Its importance was magnified by the Maulavis and gave a great impetus to the movement. On a sudden, however, it seemed as if the movement would collapse. Fugitives came pouring down from the North-West, bearing intelligence of the death of Sayyid Ahmad, and the dispersion of his followers.

ART. IV.—*Juventus Mundi; The Gods and Men of the Heroic Age.* By the Right Honourable William Ewart Gladstone. London. Macmillan & Co., 1869.

IN the latter half of this nineteenth century classical studies have entered on an altogether new phase. Though a large number of scholars, of whom the late Earl Derby may stand as the representative, still study the antiquities and literature of Greece and Rome, as a training for the taste, and a field for the display of fine æsthetic perceptions; in the minds of those who have imbibed the spirit of the age, an entirely different interest attaches to them. In France and England, and above all in Germany, there prevails a most eager curiosity about the history of religion, and the story of our race in primeval times. Nor is the interest purely scientific. Sated with the luxuries and improvements and shams of civilisation, we seem to turn with a keen interest to the records of simpler and less hypocritical ages, and yearn to be "pagans suckled in a creed outworn." It is impossible to be blind to the fact that the zeal and enthusiasm of Sanscrit scholars is based upon the persuasion, that with the exception of some books of the Old Testament, the Vedas are the oldest monuments of religious thought, and carry us further back in the history of our race than any book except Genesis.

And it is "as containing a mass of information respecting "man in a primitive or very early stage of society, which has "not even yet been thoroughly digested and such as is nowhere "else to be found," that the works of Homer (whether he be an individual poet or a personified recension) still have a charm for educated men, who are more at home in Lord Derby than in the original Greek, and do not feel the enthusiasm of a Gibbon or a Goethe for the 'established church' of paganism. We propose to draw attention in the following short paper to those parts of Mr. Gladstone's recent work in which he attempts to digest and co-ordinate this 'mass of information;' considered in any other light, his work can scarcely claim to be of *mundane* interest; but when Homer and the Vedas and the Indian, Norse, and Slavonic epics have been subjected to a searching examination, we may reasonably expect that many a riddle of human history

will have been solved, though many others in the inevitable irony of fate may have arisen to demand solution.

Perhaps the most important part of the work is the treatment of the Homeric mythology. Those who have read Mr. Gladstone's previous work will find nothing very new in this treatment. In his previous work he upheld the theory which found favour with Dutch scholars in the 17th century, and misdirected to a certain extent the learning and industry of Creuzer, that the Greek mythology was all derived from the Old Testament. Modern scholars are mostly of opinion that if we have in Greek mythology the remains of a primitive Oriental monotheism, that venerable religion must have been changed a good deal in the process of transmission. Since the discovery of the intimate relations which subsist between Sanscrit, Greek, Latin, and the other Indo-Germanic languages, a new era has commenced for mythological science. It has been felt that there cannot be a science of Greek mythology any more than a science of Greek grammar; that the study of mythology must extend over a wider field, and embrace all the beliefs of the kindred Aryan races. Accordingly the principal German students of comparative grammar have undertaken to furnish us with a comparative mythology. Max Müller in his Oxford essay and subsequent Lectures explains most of the stories of Greek mythology by the phenomena of the dawn. Athenè is the dawn, Helen is the dawn, Europa is the dawn; the war of Troy is a siege of the East by the Solar powers. The objection usually made to this theory is that it explains too much. Though we may allow full force to the fact that early rising is more characteristic of a primitive than an advanced stage of civilization, it is impossible to suppose that our Aryan ancestors can have thought of nothing else. But we find other writers on the subject, making an attempt to explain all mythology by the most obvious associations of the domestic life of our Aryan forefathers who may be supposed to have imagined Gods in all things similar to themselves. *Humana ad deos transferebant*. This idea is well worked out by Professor Kuhn, and promises more than the theory of Max Müller. It does not, however, deal much with the prominent figures of the Roman, Greek or Hindu Pantheon. The truth appears to be that while the nations of antiquity borrowed their gods and their cults very freely from one another, there has always been among the Aryan nations a set of superstitious customs almost identical. Such superstitions are not to be found even in

poetic literature, but it appears from evidence cited by Professor Kuhn that Christianity has not been able to eradicate them. The English, according to Mr. Disraeli, profess a Syrian religion, but Professor Kuhn asserts that the same superstitious observances are found among the peasants on the banks of the Thames and the ryots on the banks of the Ganges. This theory, unlike that of Professor Max Müller, does not clash with a fact well known to every careful student of antiquity, that in early times the names and even the attributes of gods were most freely borrowed. To take a familiar instance, the Romans found that their god of merchandise agreed in one of his attributes with the Greek. They accordingly borrowed for their own deity all the attributes of Hermes, and so Mercurius came to inherit a rich store of legend elaborated by Grecian fancy.* We are inclined to believe that if the comparative mythologists are destined ever to attain solid truth—a result of which we feel very doubtful—it will be by the line of investigation suggested by Professor Kuhn. But it is obvious that such a theory would leave many of the most fascinating creations of the genius of Homer unexplained. It would leave in every mythology a distinctly national element. It would recognise the fact that in some cases gods and their cults were transplanted bodily from a foreign soil, as the worship of the Great Mother from Pessinus to Rome. It would not exclude that tendency to revert to the original type, which produced Manichæism and Sufeism and upheld the dominion of the Roman Catholic Church over the Latin races. But it would hardly make such demands upon our credulity as the tempting generalizations of Max Müller.

Those of our readers who have followed us thus far will see that we are able to approach Mr. Gladstone's theory without any *arrière pensée*. Let it once be shown that there was a lively intercourse between Judea and Greece, and that the Jews of the time of Homer were acquainted with the doctrine of the Trinity, and we see no more improbability in the Greeks having borrowed certain elements of their religion from the Jews, than in the Persians having borrowed Muhammadanism from the Arabs. But the first point which Mr. Gladstone has not taken the trouble to prove is, that the Jews possessed the doctrine of the Trinity and the Messiah at the time of Homer, who is considered

* In the same way Saturnus, the god of agriculture, was identified with Kronos. Preller, *Römische Mythologie*, p. 499.

by Mr. Gladstone to have lived before the fall of Sidon reputed to have taken place in 1209 B.C. This, some people would not be inclined to grant.* But Mr. Gladstone does not suppose that the Greeks learned these doctrines from the Jews, but from the Phœnicians. This involves the assumption that the Jews had to a certain extent converted the Phœnicians, and persuaded them to adopt their pure and spiritual religion. We had been always under the impression that the facts of history point to a conclusion directly the reverse of this; that the Jewish monotheism found small favour with the kindred Semitic races. M. Rénan indeed is of opinion that it was the mission of the Semitic nations to elaborate the conception of monotheism. But Max Müller asks with some pertinence:—"Can it be said that all the Semitic nations comprising the worshippers of Elohim, "Jehovah, Sabaoth, Moloch, Nisroch, Rimmon, Nebo, Dagon, "Ashtaroth, Baal or Bel, Baalpeor, Baalzebub, Chemosh, Milcom, "Adrammelech, Annamelech, Nibhaz and Tartak, Ashima, "Nergal, Succoth-Benoth, the Sun, Moon, Planets, and all the "host of heaven, were endowed with a monotheistic instinct?"†

In order however to exhibit Mr. Gladstone's theory in a favourable light, and in our opinion to demonstrate most clearly its utterly unsatisfactory character, it is necessary to draw attention to those elements in Grecian mythology which are in Mr. Gladstone's opinion corruptions of Jewish doctrines. The God whom Mr. Gladstone considers distinctly Phœnician is Poseidon. He considers that Homer, who was the creator of the Greek mythology, though he was in all points essentially a Greek, yet borrowed the mythology and geography of the 'outer world' of the Odyssey, which begins with the Lotos-eaters and ends with the Pheacians, from the Phœnicians. "Mure suggests that the "name Phaiakes is a parody of the name Phoinikes. Homer "paints them as a wealthy, unwarlike people, singularly expert "in navigation. This apparent incongruity falls in with the "case of Corfu, if it was then inhabited, as it has been in later "times, by a stationary, gentle, indolent peasantry and at the same "time held by a dominant settlement or colony of foreigners, "ruling it through maritime power. Mure cites Phaïk as "a Semitic word for 'magnificent,' and Scher, as meaning 'an

* The theory is of course mainly based upon the use of the plural Elohim with a singular verb, and upon the so-called Theophanies.

† *Chips from a German Workshop*, vol. i, p. 345.

"emporium." In this Phœnician or Outer world, Athenè who had "constantly tended Odysseus while in Troas, and who resumes "the regular charge of him in Ithaca, systematically abstains "from helping him; and wholly disappears until Poseidon has, "in the Fifth Odyssey, voluntarily receded from the scene. She "declares that respect for her uncle was the motive for her own "disappearance. The presumption then is that this Outer world "was a sphere in some way so specially his own, that Athenè, "whose power and prerogatives in Homer are so extremely "lofty, was unwilling to offer him any opposition there."

The argument in the last sentence would be stronger if Athenè were in the opinion of Mr. Gladstone a distinctly Hellenic goddess, the Grecian personification of the dawn or of the blue sky of Attica and Argolis. But Athenè is also borrowed from Judea, or rather, as Mr. Gladstone would put it, is a fragment of a primeval revelation made to our first parents. With reference to Athenè being born of Zeus without a mother, Mr. Gladstone observes that "if the Hellenes had preserved the tradition of "the Logos" (an idea, by the way, of Alexandrian parentage) "it was impossible to clothe it, for the purposes of their system, "in a more appropriate form." Possibly not, but what becomes then of the national opposition between Athenè and Poseidon?

Again, though the Pheacians are Phœnicians when it suits Mr. Gladstone's purpose, he treats them in another part of his work as representative Greeks of the heroic period. He observes "the delineation of the whole character and demeanour "of Nausicaa is probably due rather to the Hellenic experience "of the poet than to any minute observation either of Phœnicians "or of Trojan manners." But as Nausicaa was evidently of the ruling caste in Scherie, either Mr. Gladstone's theory that the Pheacians were Phœnicians, or his persuasion of the historical fidelity of Homer, must fall to the ground.

Though Mr. Gladstone brings forward no etymological reasons for supposing Poseidon to be a Phœnician god, not even alluding to the probable identification of the Poseidonian demon Melicertes with Melkarth, he is persuaded that the special attributes of this god point to Phœnician associations.

"With respect to the trident, an instrument so unsuited to "water, it appears evidently to point to some tradition of a "Trinity, such as may still be found in various forms of Eastern "religion other than the Hebrew. It may have proceeded "among the Phœnicians from the common source of an older

"tradition ; and this seems more probable than its direct derivation from the Hebrews, with whom, however, we know that "the Phœnicians had intercourse." We wish Mr. Gladstone had been more particular in his account of the oriental Trinitarian systems of the time of Homer. But as to the trident being so unsuited to water, we should like to ask Mr. Gladstone if he has ever seen an eel-spear. We shall expect to be told next that the trident of the Retiarius had some profound mystic significance.

Mr. Gladstone's persuasion of the Phœnician origin of Poseidon makes it necessary for him to assert that he is not a god of the sea as an element at all. He is not "the god of moisture or even of water generally." This may be true of Homer, but in the local legends of Greece Poseidon appears to have been a god of water generally, as his name, the derivation of which is to unprejudiced eyes plain enough, would lead us to suppose. *Æschylus* in *The Seven against Thebes* speaks of "the water of Dirce, the most nourishing of all the streams which the earth-surrounding Poseidon sends up." And as a parallel to the passage in Homer in which Poseidon's palace is placed in "the depth of the glassy sea," we might quote another from Pindar* in which he is described as dwelling in "the midst of the Alpheus." He is "the leader of the Nymphs," the "god of fountains," the "god of lakes." He is called "the fosterer of plants," because, as Cornutus has it, "the moisture in the ground is the cause of plants growing out of it." This explains his being so often connected with Demeter, and throws light upon the story of Turo† narrated in the eleventh book of the *Odyssey*.

His title "Shaker of the Earth" can be easily explained by the fact that in ancient times such phenomena were frequently supposed to be caused by "winds under ground or waters forcing way." The connection of the horse with Poseidon is by Mr. Gladstone explained by the assertion that the Phœnicians must have been fond of games, because the Phœnicians were.‡

* *Olymp.*, vi, 58.

† Of course Mr. Gladstone connects her name with Tyre. Other etymologies have been suggested.

‡ We beg to suggest a very plausible explanation for Mr. Gladstone's consideration. The Phœnicians were great sailors. Now the first thing a sailor does on landing is to go for a ride. *Argal*, the horse must have been sacred to Poseidon, a Phœnician God.

Therefore all such contests must have been under the special patronage of Poseidon. Accordingly, when the Hellenes introduced the horse into the institution of the games, chariot-races and horsemanship, and the horse generally, came under the special care of Poseidon. This theory Mr. Gladstone judiciously calls a *hypothesis*. For our part we see no reason to prefer it to the explanation of Preller, who supposes that the horse was connected with Poseidon because of the idea of swiftness and rapidity of motion being common to the horse and the waves of the ocean. It is worthy of mention, that upon this hypothesis he builds no theory, but merely throws it out as an explanation of an acknowledged fact. Mr. Gladstone may indeed boast of having out-Germanized the Germans.

But those divinities who are to be considered as most strikingly embodying the Messianic tradition are Leto, Apollo, and Athenè. Ordinary mythologies suppose Leto to represent the night, out of which the light of day is born. Such an idea is in harmony with Greek sentiment. Greek poets love to speak of *phôs* as the daughter of *euphrone*. But Mr. Gladstone supposes, that the reverence with which she is treated in Homer is to be accounted for by the fact "that in the tradition of a Deliverer, "divine and yet in human form, which was handed down through "the line of Patriarchs, and enshrined in the sacred Scriptures, "that Deliverer was emphatically described as the Seed of the "Woman." This would amply account for the phenomenon, but there is simply no evidence that Apollo was borrowed from the Jews. Even if we concede that his worship was borrowed from the Phœnicians, we should find it difficult to identify him with the Jewish Messiah. For though in his capacity as a destroyer of monsters he may seem to point to some such tradition, and though we might be tempted to identify Athenè with the Hebrew *Khochmáh*, we must remember that the influence of the religion of the Phœnicians upon the peoples which came in contact with them was throughout a debasing one. M. Rénan may believe in the monotheistic tendency of the Semitic races, and in his more ecstatic moments may see no difference between Hanniel and Hannibal (the grace of God and the grace of Baal), but those who follow historical records as a surer guide than etymology cannot be so misled.

The testimony of the books of the Old Testament with respect to the influence of the Phœnician religion upon the Jews is very plain and cannot be mistaken. There

is no doubt that the Jews learnt from them the practice of human sacrifices. "They have built also," says Jeremiah, speaking in the name of Jehovah, "the high places of Baal to burn their sons with fire for burnt-offerings unto Baal, which I commanded not, nor spake it, neither came it into my mind." And M. Rénan himself admits that "les mythes les plus sensuels de l'antiquité, les cultes phalliques, le commerce des courtisanes, les infâmes institutions des galls et des hierodules venaient en grande partie de la Phénicie."* The religion of the Phœnicians was in fact a Pantheistical personification of the forces of nature. But such religions, however interesting to the philosopher, have always degenerated into the grossest corruption. It is obvious that between the worship of the reproductive powers of nature and the monotheism of the Jews, there could be no real alliance. Accordingly when Jezebel set up four hundred and fifty prophets of Baal, and four hundred of Astarte,† we find that Elijah, the prophet of Jehovah, withstood them in the most determined manner. It is useless to multiply instances which will at once occur to every one. It is well-known that wherever the Phœnician merchants travelled, they spread sanguinary and degrading superstitions. And yet we are asked to believe, that through these impure channels were transmitted from the Jews to the Greeks those Messianic conceptions which throw a halo round the forms of Apollo and Athenè and Artemis, the most pure and lofty deities of Olympus.

The same considerations which make us receive with distrust the theory of Mr. Gladstone that the conception of Apollo was in any of its purer elements borrowed from the Phœnicians, lead us to welcome his theory of the genesis of Aphrodite. He is decidedly of opinion that she is a deity of oriental origin. He bases this upon the fact that she is always represented in the Iliad in a ridiculous light, that she appears among the Olympian family only in the Lay of the Net, which Mr. Gladstone supposes to be of Phœnician origin, and that she was principally worshipped in *Kypros*, a Phœnician colony, from which she also received the name of *Kypris*. The cumulative fashion in which Mr. Gladstone arranges his argument is very effective in a case of this kind, in which there is no antecedent

* *Histoire des Langues Semitiques*, p. 173.

† In our version wrongly translated "groves."

improbability to prejudice us against it. It is highly probable that the Greek people, as well as the Italian, German and Scandinavian races, possessed, before their contact with the Semitic races, some goddess of love. She may have been no other than Dione, who is represented in Homer as the mother of Aphrodite. She was no doubt pushed out of sight by the Semitic Aphrodite,* the Astarte or Ashtoreth of the Phœnicians, the Alilat of the Arabs, and the Mylitta of the Babylonians; though the Greeks introduced into her worship many ideas which are far removed from the material grossness of the orientals. Her worship can be traced wherever the Phœnicians are known to have had settlements, in Kypros, in Cythèra, on Mount Eryx. Mr. Gladstone lays great stress on the taunts of Helen respecting her supposed favourites in Mæonia and Phrygia. Probably the story of Helen herself is to be ascribed to the influence of Phœnician merchants in Cythèra. Corinth, which was so famous for the worship of Aphrodite, was no doubt an important harbour in Phœnician times. St. Augustine mentions a heavenly Venus worshipped at Carthage with her attendants Anua and Dido.† It is not in accordance with the aim of Mr. Gladstone's book, which is a Homeric study, to enter into illustrations not derived from Homer, but it may be remarked that the same confusion between the "daughter of Zeus," the Hellenic goddess of love, and the oriental importation, may be traced throughout Grecian literature. But Mr. Gladstone's object is to furnish a detailed picture of all the Grecian gods as represented in Homer. And because, whatever we may think of some of his theories, his work must be allowed to be all solid, and his analysis scrupulously honest, we can entertain no doubt that his labours will always be of use to the candid enquirer.

There can be no doubt that Mr. Gladstone has adduced strong arguments to show that the relations of the Phœnicians with the Greeks were far more intimate than we were taught in our school-boy days. As now, so in those far distant ages,

* According to Preller, the word Aphrodite is derived from the Chaldean *peridâh* (dove) or *Aphrûdeth*—a connected form with the Phœnician article prefixed. Mr. Gladstone identifies her with Mithra, whom we have always supposed to be an Aryan god of light.

† Connected with the Hebrew David (beloved). The close connection of the Hebrew and Phœnician languages contrasts strangely with the utter opposition between the religions of the two nations.

commerce was the great agent of civilisation. The Phœnician factories were established on the shores of Greece under circumstances very similar to those which led Englishmen to establish themselves in the realms of the Great Mogul. From time immemorial the chiefs and princes of the East loved to array themselves in garments of a purple hue. This dye was obtained from the shell-fish, which gave forth in death a small drop of the fluid. It was to obtain this that the Phœnician mariners sailed Westward Ho! It was in order that none of the precious fluid should be lost, that they established on the promontories of Laconia and Argos, and inland in Bœotia in the vicinity of the most productive fishing grounds those fortified factories which became the centres of civilisation, and in many cases of corruption, for the simple Pelasgians of Greece. Such a pioneer of civilisation was Herakles, if we are to believe modern scholars; his dog was the pointer trained to discover the shell-fish, and the golden cup in which he crossed the ocean, the round hull of a Phœnician trading ship. So far most modernscholars seem to be agreed. But Mr. Gladstone thinks that the word Phœnician is merely another word for oriental. He considers it to represent the aggregate influence of Semitic nations and the Egyptians upon the Greeks. "It may indeed well have happened that the name Phœnician should, for the Greek people of that day, become the synonym or representative of 'foreign'; so that whatever came from Syria, Assyria, or Egypt, would sound as Phœnician to the Homeric ear, much as in later times every foreigner in the Levant was a Frank, and as in Abyssinia (we are told) a foreigner is at this our own epoch termed an Egyptian." Having thus given to his theory the requisite elasticity, Mr. Gladstone finds no difficulty in applying it to all the known facts. In common with Curtius, he considers Minos as a type of Phœnician supremacy. He sums up all the hints given about him in Homer, and comes to the conclusion that he bore sway over a considerable dominion, both maritime and continental, in Greece. One of the facts which makes this most probable, is that there was a great mixture of languages in Crete. We are surprised to find that he considers the Eteocretes to be Phœnician.* We should have thought that the Eteocretes were as the name seems to imply "true Cretans of the old stock," and should have looked for the sailors of Minos among the "barbarous speaking"

* P. 121. At p. 89 he calls them Pelasgians.

Carians who were no doubt a mixed population of Phœnicians, and races that had adopted the Phœnician civilisation, though probably of the same stock originally as the Greeks. The story of Theseus and the Minotaur would seem to point to the Molech sacrifices of the Phœnicians. Kadmos the "man coming from the East"* may very possibly have been a Phœnician. And the fact that the ancient Greek letters reported by Herodotus to have been brought by Kadmos, correspond exactly to the Phœnician, and that the earliest Greek inscription is written from right to left, have led even those who are most sceptical about Phœnician influence to admit that the Greeks received some important elements of their civilisation from Phœnicians. But Mr. Gladstone further considers the Æolid houses to be Phœnician, and accounts for Homer's never mentioning Æolus himself in connection with them, by his natural dislike to glorify the immigrant who had never lost his foreign character. To support this theory he throws out a suggestion, that the word *aiolos* or 'variegated' may refer to the Semitic preference for elaborate ornamentation.

Moreover Mr. Gladstone endeavours by means of the Phœnicians to connect Greece with Egypt. It is notorious that the Greeks always looked with great reverence on the Egyptians. Plato and other distinguished philosophers were reported to have visited the Nile and drunk deep of the wisdom of the Egyptian priests, but such stories when subjected to a critical examination have almost always broken down. Mr. Gladstone has suggested that the Phœnician navy may have been to the Egyptians under Thouthmes III of the eighteenth dynasty about 1600 B.C. what it was to the Persians in the time of Darius and Xerxes. This would account for the filtration into Greece of Egyptian ideas. Moreover, he remarks that if we allow that the Egyptian empire by land subsisted long afterwards, we have no difficulty in understanding how Memnon, a man according to Homer of great personal beauty, could be called an Egyptian.† Mr. Gladstone's theory amounts in fact

* *Kēdēm* in Hebrew may mean either 'the East' or 'Ancient Time.' In the latter case the ancient 'Kadmus' of Sophocles may have an etymological signification. (*Dictionary of the Bible*, vol. ii, p. 866.)

† Virgil, with his usual felicity in catching his master's meaning, speaks of "*nigri Memnonis arma*." This is much like the fashion which prevails among English poets of praising Cleopatra's "*swarthy cheeks and bold black eyes*."

to this, that the Phœnicians were the only civilisers of Greece proper, and that from them, and not from Egyptians or more kindred tribes, did the Greeks learn those 'beggarly elements' which afterwards expanded into Greek literature. In our opinion, the whole of Mr. Gladstone's ingenious theory is weighted with a great antecedent improbability. Considering the well known prejudice which the European Greeks bore towards all so called barbarians, many of whom were most intimately related to themselves, it does not seem likely that they would ever have fraternized with Phœnicians. But Curtius, the great German historian of Greece, has proposed a theory which solves all difficulties, and which falls in to a great extent with that of Mr. Gladstone. It is briefly this, that in prehistoric times Greece was colonized by kindred tribes from Asia Minor. Comparative grammar has shown, that there was no great difference between Carians and Phrygians and Greeks.* But the European Greeks appear in after times to have looked with contempt upon these tribes, though they always kept up the feeling of intimacy with those Asiatic Greeks whom they felt to be related to themselves. Among these Asiatic Greeks Canaanite tribes like the Solymi settled, and from among these Greeks came Danaus and his fellows, bringing with them the wisdom of the Phœnicians and Egyptians. It seems probable that for a long time the Ionians were the pupils of the Phœnicians in navigation, though they appear to have ultimately supplanted their masters. If Homer, according to the almost universal testimony of antiquity, was an Asiatic Greek, it is not difficult to understand his having borrowed, as Mr. Gladstone supposes him to have done, a great part of his Odyssey from the stories of Phœnician navigators, though they had probably passed, before reaching him, through Ionian channels. Mr. Gladstone lays it down as certain, that he was an inhabitant of Greece proper, but he has assigned no very cogent reasons for this, except that he appears to have been well acquainted with the geography of European Greece. But he seems to be still better acquainted with the scenery of Asiatic Greece,† and

* Plato was aware that the words for *fire*, *water* and *dog* were the same in Greek and Phrygian; and supposed that the Greeks borrowed them from the Phrygians. Max Müller, *Lectures*, vol. i, p. 121.

† Compare his accurate knowledge of the Gygean lake and Mount Tmolus (*Il.* ii, 865; *xx*, 392) with his absurd notion (*Od.* *xx*) that a pony-carriage could be driven from Sparta to Pulos. (See Clark's *Peloponnesus*.)

it is a mere baseless presumption to suppose that travelling was unknown in ancient times, though some of our modern critics write as if, before the invention of steam, there was no communication either by land or sea. At any rate, if Mr. Gladstone's theory be correct, it appears to us most improbable that Homer should have borrowed directly from *Phœnician* mariners.

And here we cannot help noticing a still more daring and to our mind equally probable theory of Professor Curtius. He supposes the poems of Homer to relate to the colonisation of the west coast of Asia Minor by the Achæans, who were dispossessed by the Dorians. Even by Mr. Gladstone's showing, there was little difference between the Trojans and the Greeks. The armies of the two nations were different, in that the Trojans were assisted by contingents from all parts of Asia Minor, while the Greeks were men of one speech and nationality, but it does not appear that the Trojan and Grecian chiefs had any difficulty in understanding one another. This makes the hypothesis, that the Greeks who attacked Troy were merely Achæans waging war against fellow-countrymen, who had to a certain extent adopted Asiatic customs and were assisted by Asiatic allies, all the more probable. If we adopt this hypothesis of Professor Curtius, we can understand why the expedition was said to have sailed from Aulis, from which the Æolic migration took place, and not from Argos or Mycene. We shall then have no difficulty in explaining the numerous predatory expeditions of Achilles recorded in the *Iliad*, which seem to interfere with the epic unity of the poem. From the language of the poems it is probable that they received their last form among an Ionic race. The fact that the *Demos* is evidently rising into power in the state of society depicted in the poems, points in the same direction.

This Ionic character attaches to the *Odyssey* much more than to the *Iliad*. It has been often remarked, that the tone of the former is more modern. If this be true we can easily understand how the *Odyssey* comes to be full of wild nautical *yarns*, and descriptions of outlandish countries, without resorting to the arbitrary hypothesis that a Greek of the mainland borrowed a great part of a pre-eminently national poem from the legends of an alien Semitic race.

It is curious that Mr. Gladstone supports this latter theory of the German professor in the most powerful manner by his own conclusion with respect to the Pelasgians. He considers

that the Pelasgians formed the basis of the Grecian and Trojan nations, and the Achæans were merely a dominant tribe which had risen to importance before the time of the Trojan war. The Achæans were, in fact, a race of Grecian Kshatryas, doomed to be supplanted in their turn by the Dorians. Mr. Gladstone shows, by a comparison of words in the Greek and Latin languages, that while words relating to agriculture are identical in Greek and Latin, the words relating to war are, as a rule, different. He follows Niebuhr in supposing that the words relating to tillage and peaceful life are Pelasgian, and that those relating to war indicate that it was the favourite pursuit of conquering tribes. Such tribes were the Oscans among the Italians, and the Helloi among the Greeks, of whom the Achæans appear to have been the dominant aristocracy. It has been often remarked that huntsmen and fishermen, and in fact any set of men who follow some particular engrossing pursuit, are wont to form or select a vocabulary of their own. For Mr. Gladstone is careful to remind us that we are dealing with different branches of the same Aryan stem.

This has not been proved by Mr. Gladstone, but might easily be proved by a comparison of the agricultural and military vocabularies of the Greek and Latin tongues with the corresponding words in Sanscrit. Although the resemblance between the classical languages and Sanscrit is much more striking in the case of the words which relate to peaceful pursuits, it would be easy to find counterparts in Sanscrit to some of the military terms in Greek and Latin. For instance, the Latin *ensis* may be compared with the Sanscrit *asi*, the Greek *ios* with the Sanscrit *ishu*, the Latin *rota* with the Sanscrit *ratha*, the Greek *kuklos* with the Sanscrit *chakra*. In fact, where the words differ, it would be easy to point out that the roots of each subsist in the kindred languages. But war is a progressive art, and as different materials were used for making weapons, the names of the weapons themselves began to vary among the different tribes. In the case of the shield, we find the same materials used by the different Aryan nations, and the roots existing in the kindred languages, and yet the names of the implements differing. This is evident from the Sanscrit *charman* compared with the Latin *corium*, and the Greek *scutos* compared with the Latin *scutum*, which Mr. Gladstone parallels by *sakos*, and then observes that there is no connection between the two words. That the idea of a shield should be

expressed by *hide* in Latin and *weight* in Greek, is obviously a mere accident. The roots of the words are found in most of the Aryan languages, and we may suppose the subsequent divergence in the names of the weapons to be due to some law of natural selection. But if Mr. Gladstone's theory be right, it gives the greatest support to that of Professor Curtius. We not only see that there was an element common to the Greeks and Trojans, but we see that that element was Pelasgian. And it appears that in spite of all the declamations of Greek rhetoricians, the Asiatic and European shores of the Ægean were from very early times peopled by the same Pelasgian race. Those tribes of the Pelasgian race which settled on the sea coast of Asia Minor, or, at any rate, those connected with the sea, are known to us by the name of Ionians, and in the ancient world generally as Iavones, Javanim, Yavanas and Uinim. Moreover, we think that a careful examination of the false story which Ulysses relates to Eumæus will show that the poet learnt the outer geography of the Odyssey, not directly from Phœnician but from Ionian mariners. To begin with, the Egyptians are represented as brave, merciful and generous, while the Phœnician who attempted to sell Ulysses in Libya is represented as an avaricious but fair-spoken impostor. That the expedition invented by Ulysses points to some real expedition in which Achæans were defeated by Egyptians, we do not believe. Men are not accustomed to speak in that laudatory way of their enemies, especially when they have been defeated by them. It is far more probable that the story was borrowed from some of the Ionians, who under the title of *Uinim* were settled in Egypt under the eighteenth dynasty. For the curious coincidence between the details of the story* and the account of Exodus renders it probable that it possesses considerable historical truthfulness. It is evident also that at the time the Odyssey was written, the Phœnicians were more powerful in the western than in the eastern parts of the Mediterranean. The ship in which Ulysses is sent as supercargo, but with the secret understanding that he is to be sold in Libya as a slave,† carefully avoids Crete. The story indeed is a record of the

* *Odyssey*, Book xiv, lines 271 and 286.

† The Phœnicians were no doubt as ready to sell Greeks in Africa as they were to sell Jews to the Greeks. Joel iii. 6. This is well illustrated by the story of Eumæus. *Odyssey*, Book xv.

commercial jealousy which no doubt subsisted between the Phœnician and Ionian mariners. The Phœnicians evidently looked upon the lively Ionian race as *interlopers*, and did not scruple to sell them as slaves whenever they got a chance. This will account for the epithets, indicative at once of commanding intellect and harmful craft, that we always find attributed to the Phœnicians in Homer. That such was the character of the nation, was certainly the opinion of the Romans in later times; and even the great Hannibal showed himself in his power of devising stratagems and ability in *getting round* savage tribes a true descendant of the Phœnician navigators. If Mr. Gladstone means to say that the Phœnicians and Ionians possessed a large stock of stories of adventure in common, like the Spanish and English in the Elizabethan period, we should yield implicit credence to his theory; but if he means, as he seems to do, to imply that the part of the Odyssey which relates to the "outer Phœnician world" is *purely Phœnician*, and that Homer is scarcely responsible for it (though he must at any rate have translated it into Greek verse), we beg to reject it as a 'pestilent heresy,' and as ill according with the highly orthodox opinions which Mr. Gladstone holds on the unity of authorship of the Homeric poems.

Of this unsatisfactory controversy, it appears that no end is ever to be granted to the weary students of Greek literature. The ball flies backwards and forwards, and the players follow the game with infinite zest, but the spectators do not share their satisfaction. Still it is evident that Wolfe's celebrated theory has not been thrown away. Though in the particular branch of literature to which he applied it, it has, on the whole, not met with much favour, and has been condemned by most scholars, and rejected as 'not proven' by a still larger number, it has inspired German orientalists with an enthusiasm which sends them forth conquering and to conquer. After bisecting and trisecting Isaiah, and (why, we never could understand) raising thereby the wrath of the orthodox world, they have fallen upon Sanskrit literature, and the unfortunate Hindus may expect to see the Mahábhárata torn into as many shreds as there are gods in their Pantheon, and every fragment assigned, with unerring confidence, to a different date. But recently the unity of authorship of the Homeric poems has had some few zealous defenders in Germany, who do not yield in confidence to their adversaries. English

scholars for the most part* fold their arms and look on with good-humoured incredulity. Seeing that the arguments on both sides are utterly inadequate, and that a belief is not necessarily wrong because it was popular in antiquity, they yield a qualified assent to the traditional account. Mr. Grote has indeed dichotomized the *Iliad*, but he is not very confident in the success of his experiment. Mr. Gladstone believes that the *Iliad* and *Odyssey* are both of them connected wholes, possessing a perfect epical unity, and are the works of one and the same poet. It certainly would be difficult to dissect the *Odyssey* satisfactorily, as the slaughter of the suitors is steadily kept in view throughout, whatever we may think of the last book. In the *Iliad* no doubt there are slight discrepancies, but if we lay great stress on mere trifles, we shall have to suppose two Miltons, for it is indubitable that in the first book "heaven" is described as "pouring out her victorious bands" in pursuit of Satan's host, while in the sixth book we read that the faithful angels were merely spectators of the victory of Messiah over the rebels, and that "eternal wrath burnt after them to the bottomless pit." With those who hold that the *Iliad* and *Odyssey* were not by the same hand we should be inclined to deal more tenderly, for there were *chorizontes*† also in antiquity, but Mr. Gladstone thinks they have very little to go upon. As for the discrepancies between the two poems, it seems that the poet of the *Odyssey* carefully avoids all the exploits of Odysseus mentioned in the *Iliad*, which may be used as an argument by either party, though we should suppose it rather to point to a unity of authorship of the two poems. Mr. Gladstone considers that we possess substantially the author's text of Homer, and brings evidence to show that the poems were well known in Greece before the time of Pisistratus. He does not believe that modern European scholars can pronounce with certainty on peculiarities of language which escaped the attention of Greek students. On the whole he is decidedly opposed to the negative critics, and though they have done a great deal for the analysis of the poems, it is refreshing to find a critic who does not consider Homer merely as a field for displaying his own ingenuity, and refrains from bringing against the unity of the *Iliad* arguments which would separate into

* Always excepting Mr. Payne Knight, who is most positive as to the unity of authorship and special unity of the poems.

† Those who separate the authorships of the *Iliad* and *Odyssey*.

fragments any work published at the present day.* We do not mean to assert our confident belief in the conclusion of Mr. Gladstone, but it has always appeared to us that the arguments brought against the unity of authorship of the *Iliad* prove so much that nothing whatever can be built upon them. Moreover, we never could see why the fact that gods are found fighting on both sides in the Trojan war, should prove that a Trojan war never took place. It is much more probable that if the *Iliad* has any kernel of truth in it at all, that kernel is what it was always, until modern times, supposed to be—a war between Europeans and Asiatics, than that it represents “a siege of the East by the Solar powers,” or any thing else that etymology and excited fancy may suggest. As well might it be held that the conquest of Mexico by Cortez points to “a siege of the East by the Solar powers,” because people were found to swear that they saw the glorious apostle St. James on a grey horse leading the Castilian adventurers. The sooner such hallucinations are banished from the literary world, the better. Putting out of sight the supernatural matter, Homer seems to be on the whole a faithful observer. Though Mr. Gladstone does not seem to be satisfied with his geographical description of the plain of Troy, we must remember that great changes may have taken place since then, and it has been found difficult to reconcile the present appearance of Carthage and Navarino with the description of the same places in the works of sober historians.

Mr. Gladstone has carefully pointed out the points of difference and of resemblance between the Greeks and Trojans. As far as we can see, he considers the Trojans to have been more Asiatic than the Greeks, more under the dominion of superstition, and with less sense of religion as a restraining power. He considers the government to have been more despotic, and a system of polygamy to have been in vogue “wholly without counterpart in Greece.” It seems to us that he has considerably exaggerated the points of difference. In particular we are unable to understand why he remarks that “in Troy the gloating eyes of the old men follow Helen as she walks,”†—a note

* From the analysis given in the *Academy* for October 1869 of Nuttall's work on the genesis of the Homeric poems, it appears that he takes up pretty much the same ground as Mr. Gladstone. The work appears to contain a most triumphant vindication of the unity of the *Iliad*, coloured by national animosities. The author was a Dane.

† Page 399.

of depravity in the Trojans which he takes care to remember against them.* The passage on which he bases his stricture is the following :—"The Trojan elders, when they saw Helen coming to the tower, softly, one to another, spake winged words:—Surely none can blame that the Trojans and the well-greaved Achæans should for a long time suffer woe for the sake of such a lady. She is wonderfully like the immortal goddesses to look upon. But nevertheless though she is such, let her return in the ships, and not entail woes upon us and our children after us." We must confess that in the above speech we fail to detect the objectionable oriental element.

Our author considers that the Greek morality of the heroic age was superior not only to that of the Trojans but to that of Greece in subsequent times, when religious worship had become corrupted, and the gods were patterns of every vice. He holds that, though Greek theology progressed marvellously after the time of Homer, the progress was confined to a select *coterie*, and that the superstitions of the multitude became more and more degrading until they were brought in conflict with Christianity. No doubt the Stoics were in some cases (like the Pharisees who have been white-washed by Mr. Deutsch) terrible hypocrites. The Epicureans as a body were far honester. They regarded the superstitions of the vulgar with profound contempt, while the Stoics performed sacerdotal offices with the most edifying piety. But we cannot help thinking that the scathing satire of Lucian has affixed a stigma to the Stoics which they scarcely deserved. Their creed or scepticism enabled them (in some instances at any rate) to live in the practise of virtue, in almost all to resist the fashionable worship of force, and to die with calmness.

But we do not wish to dispute Mr. Gladstone's general proposition that the Hellenic 'pouncet-box' was no remedy for the ills of humanity. The Greeks of the heroic age were restrained by considerations which in after ages lost their force. Except in the case of blood-shedding, which, as Mr. Gladstone says, was looked upon as a misfortune, and as the natural consequence of having steel ready to hand,† they would not suffer from comparison with the men of more civilized times. The chapters on the ethics and polity of the heroic age are

* Page 459.

† For steel of itself draws a man on.—*Odyssey*, xvi. 294.

admirable specimens of that historical criticism for which our age is so distinguished, and deserve to be placed beside similar passages in Mr. Maine's *Ancient Law*.

The analysis of the Homeric characters is most able, and shows how far Homer was removed from the "fortemque Gyan fortemque Cloanthum" of his Roman imitator. But we fear that the world in general will scarcely endorse Mr. Gladstone's opinion on the superiority of Achilles to Hector, founded as it indubitably is upon a familiarity with Homer which is possessed by few. He seems to think that our judgments are prejudiced on this point, because in the middle ages Hector came to be the type of a god-fearing knight with a praiseworthy reverence for the church. But this scarcely agrees with his famous opinion that "the best omen is to fight for one's country," which is worthy to stand by the side of that saying of Achilles on which Mr. Gladstone lays so much stress :—

Who dares think one thing and another tell,
My soul abhors him as the gates of hell.

Though it is somewhat presumptuous for one dwelling in 'the very heart of Philistia' to criticise the work of the great Hellenist statesman, we cannot help regretting that he has voluntarily chosen to know Homer only, and not to illustrate his conclusions on the Greeks of the Homeric ages by a comparison with the antiquities of other Aryan peoples. But this may be a wise self-denial on his part, for those books which merely propose seductive theories on insufficient data, cause a great waste of time to humanity. He appears to have done for Homer what has never been done before, and, in this labour of love, never to have kept out of sight the great importance we trust Homer will always have as an educational agent. The fact that his work is a thorough examination of the testimony of Homer, *based upon the text itself*, will render it a far more important contribution to human history than many more pretentious treatises.

ART. V.—ON THE ABSENCE OF THE DRAMATIC
SPIRIT FROM MODERN ENGLISH POETRY.

TWICE in its annals, the future historian of English literature will have to record births of poetic power, wonderful in their far-reaching splendour and the extraordinary abruptness of their appearance. On both occasions a movement at the heart of society had upheaved with a mighty effort the superincumbent weight of custom and conventionalism, and brought men face to face with the realities of life. The poetry of both periods is marked by an earnestness and enthusiasm which reveal the nature of the impulses that produced it. But while the poets of the Elizabethan era, almost with a simultaneous movement, set themselves to work to produce tragedies and comedies, the poets of the present century have thrown their energies—almost as entirely—into lyrical and subjective poetry.

It is not probable that England will ever produce a greater dramatic poet than Shakespeare. In the lucid depths of his calm and capacious intellect, all the varieties of our common human nature seem to have been mirrored in almost absolute perfection. His own personality is lost and absorbed in that of the men and women whom he has called into existence. We may speculate upon the character of the man, Shakespeare; nay, we are certain there is no affectionate student of his writings, but feels assured that there must have been in him an inexhaustible charity, an ardent love for all created things. Still, in his writings, we have not the man Shakespeare as he lived and moved among men, but the wondrous magician who “darts himself forth, and passes into all the forms of human life and passion, the one Proteus of the fire and flood.” Not the less, however, is there a measure of truth in Hazlitt’s observation, that Shakespeare wrote from the “table-land of the age in which he lived.” His contemporaries were great dramatists, though not so great as he. That marvellous and indefinable power whereby he fashions a character within and without, and breathes into it the breath of life, is possessed in perfection by him alone. His genius, perhaps, never impresses us with so profound an admiration as when we compare him with Ben Jonson, Massinger, Forde or Fletcher. A character by

Shakespeare is a veritable human being, possessing an independent centre of life; and it is only by a sort of after-thought that we think of him, as the giver of life to Hamlet or Macbeth or Othello. There is no historical personage whose idiosyncrasy has been scrutinised with greater keenness, or discussed at greater length, than that of Hamlet or Falstaff. They have provoked the same differences of opinion—they present themselves to different people in the same manifold aspects, as the distinguished men who have played an actual part in the history of the world. This is the supreme achievement of the creative genius of Poesy; and this, the contemporaries of Shakespeare have rarely accomplished. Their characters are impersonations of some one vice or emotion. They are like men and women gone mad with hate, ambition, love, lust or villany, as the case may be. Their humanity is swallowed up in the one dominant feeling; cut away that, and the whole character would vanish, like an unsubstantial vision faded. They depict villains, for example, who are nothing but villains, whose one end and aim in life is to kill everybody they can get at, with or without provocation, until they are themselves got rid of, or, as not unfrequently happens, transformed into respectable members of society, in a speech of two lines at the end of the fifth act. Their heroines—so unlike the sweet creations of Shakespeare, his Desdemona, Cordelia or Miranda—are for the most part mere monsters of the imagination, with no more of human feeling and human passion than figures carved from an iceberg. Purity in women is generally represented as a sort of accidental fact—a material thing, which may at any time be lost, like a pin from the dress, in a moment of forgetfulness or careless supervision. Naturally enough, with such a conception of this virtue, their ladies are exceedingly proud of this immaculate chastity and vaunt the fact in the face of the world with as much ostentation as an Indian Faqir exhibits a withered arm—the result of continual austerities. Naturally enough, too, we find the chastest damsels transformed all at once into abandoned women—or rather it is wrong to speak of them as being ‘transformed,’ for in truth there is no transformation of character in the matter at all: they merely cease to assume a virtue which they never possessed. Again, the most cursory reader of Shakespeare must have felt the unity of impression which proceeds from any of his greater plays. They have an organic life which grows and developes from

within ; while a play of Ben Jonson or of Fletcher is a mechanical affair put together from without. With Shakespeare, the interest is invariably concentrated on the exhibition of character ; the plot is merely the canvass on which to depict the passions and emotions. With his contemporaries, as often as not, it is some wild and improbable incident which communicates whatever of interest there is in the play ; and not seldom the play is a series of scenes which seem to have been accidentally tacked to one another without any particular design at all. But after deductions made for all these grievous defects, the Elizabethan drama remains a colossal monument of poetic power. There is such a wealth of wit to be found there—such vigour of intellect—so much of joyous stirring life. It has been well said that if all his contemporaries put together would not equal one Shakespeare, yet all their successors would not make half one. The poets of the Elizabethan era were dramatists in the true sense of the word. They did not give us analysis of character ; they did not undertake a sort of intellectual dissection of human nature, under the guise of a confidential soliloquy from the subject operated upon. They exhibited men and women in action ; they strove to make us understand the force of the passions and the varieties of human nature, by depicting them in their living effects. The genius of the age was essentially dramatic.

The poetry of the present century exhibits an order of genius the reverse of dramatic. Henry Taylor is the one modern poet who has *recovered* in his writings both the spirit and the form of the Shakespearian drama : and in all that we have to say regarding the absence of the dramatic element in modern poetry, we would desire our readers to make a tacit exception in his favour. He is like one born out of due time, or perhaps he may be the fore-runner—the herald of a new era, when our bards will have lost that self-consciousness, which is the distinguishing peculiarity of all the imaginative literature of the present century. But with this exception, we cannot point to a single dramatist worthy of the name. Wordsworth, Coleridge, Byron, Scott, Browning—have all tried their hands at this kind of composition, and it would be folly to deny that under this title English literature has been enriched with many poems which the world will not willingly let die. Even in Wordsworth's forgotten tragedy *The Borderers* there are passages as fine, as full of deep and pregnant thought, as any he ever wrote. *Remorse* and

Zapolya are rich with that sweet under-tone of harmony which blends continuously, like a musical accompaniment, with all Coleridge's poetry, and which Leigh Hunt has characterised in one of his happiest phrases as "lutes in his rhyme." *Manfred*, *Cain*, *Sardanapalus* are grand poems, but no one, we suppose, regards them as tragedies in the sense that *Othello* or *Macbeth* is a tragedy. They are not even dramatic soliloquies; for the speakers continually inform themselves of facts regarding their own personal character—certainly a work of the most useless supererogation. But some of our readers will perhaps take exception to Mr. Browning being enumerated among the undramatic poets of the century. They can point to all his writings as placed by their author under the head of tragedies, or dramatic lyrics. They can bring into court that wonderful insight which he has into the formation of character, and which he has nowhere displayed in greater perfection than in his last grand poem *The Ring and the Book*. Mr. Browning is undoubtedly both a great poet and a great thinker. Perhaps there is no living man who has grappled more closely with the problems of the time, or feels his convictions firmer beneath him. In all his works, there is, as it seems to us, the spectacle of a great mind subduing the world to itself, wringing out from its reluctant grasp the secret of that inner life, which from age to age incarnates itself anew. Remembering the host of poets who fill the ranks of English literature, we might be apt to come to the conclusion that any great originality of thought or structure is not to be looked for in these latter days. Mr. Browning's writings are sufficient to dissipate this fear. He is unique. He deals with a subject in a manner entirely his own. Under an almost perverse ruggedness of versification, he conceals a consummate knowledge of art. His finished creation is fashioned by repeated strokes, each so delicate and unobtrusive, that only when we have mastered the purport of the whole do we become aware of the skill and perfection of the execution.

Nevertheless we emphatically deny that Mr. Browning can be rightly called a dramatist. We grant that he approaches very near to it. He has almost all the qualities requisite, but only almost all. His tragedies entirely lack the tumult and the stir—the conversational flow—the variety of incident—the transitions of interest—which are essential to a drama rightly so called. The movement of the piece never passes beyond the mind—never embodies itself in action. Mr. Browning

writes like aman impressed above all things with the conviction that that portion of our life which transacts itself on the surface, and lies patent to all men, is but a very insignificant portion of our existence. In the inner chambers of consciousness there are processes of thought for ever going on, which exercise a far more potent influence in the formation of character than all the whirl of external events. These constitute the true life of the man ; and these it is that Mr. Browning gives us in his plays. He never exhibits his characters in action, when the excitement of the moment has quenched the introspective eye. But on the brink of some great crisis, in the pause *before* some irrevocable step is taken, he will depict with wonderful subtlety the thoughts which look before and after—the hopes and fears—the tumult and the calm. We have no shocks of passion which bring a man's soul to his lips ; but in their place, the unspoken soliloquies of men and women brooding over the solitary places of their hearts. In this sort of mental analysis Mr. Browning stands without a rival, but it is always Mr. Browning who does the work. He stands by as warder ; he unlocks the hearts of his men and women, and translates into his own language the thought she finds there. He takes a character to pieces ; he exhibits the springs, the curious complicated mechanism, which together constitute the man who thinks and acts and speaks. It is the psychological knowledge on which the dramatist should erect his superstructure, but not the structure itself, which is to be found in his writings. It is one thing to analyse with the nicest discrimination the mingled elements of good and evil in some strange exceptional character, and justify its ways to men ; but it requires the exercise of widely different powers to set a number of characters in motion, to depict their action and re-action one upon another, to anticipate their thoughts, deeds and emotions, under the influence of events which must not range along the beaten path of circumstances. And great as Mr. Browning is in that department of art which he has made peculiarly his own, that department seems to us quite another than the dramatic, and one which requires the exercise of a less exalted order of genius. But if it be conceded that Mr. Browning's plays lack some qualities essential to a drama rightly so called, the dramatic genius will hardly be claimed for any other of the poets of the nineteenth century. Our modern poets are lyrical and introspective. The genius of the age is anything rather than dramatic.

What now are some of the causes which have produced results in such marked contrast ? We will take the earlier literature first, and indicate—of necessity with the utmost brevity—the main agents which, in our judgment, combined to give the Elizabethan poetry a dramatic character.

First and foremost, then, there was what in the absence of a better name we must still call the Reformation. Beneath the whirl of the political events, which make up what we call the history of the age, a spiritual message addressed itself to the hearts of reflective and imaginative men, the evidences of which are discernible everywhere in the literature of Elizabeth. To explain that message and the manner in which it may be supposed to have operated upon the poetry of the time, we must enter for a moment into the sacred precincts of theology ; but it will be for a moment only. In the beginning, when St. Paul and his comrades established the first Christian churches, the message which they brought to men was that life and immortality had been brought to light through the Gospel. The strongest enemy they had to contend against—stronger than flesh and blood, was the dread of something after death, which has given birth to all the horrible rites and superstitions that have made men miserable, cruel and intolerant from the beginning of history—which will, we suppose, never cease to influence their actions. St. Paul understood the power of this terror, and he strove to eradicate it in the only way in which it can ever be destroyed. He poured the full light of day into those gloomy caverns of the mind. He declared there had been a complete unveiling of that invisible world, the thought of which shook men with fear. The middle wall of partition had been broken down, and revealed “ a heaven from which there came, and could come, nothing but light and blessing to the earth.” Men may differ as to the credibility of this message, but the hold which it took upon the hearts of those who yielded to it, is an historical fact. It addressed the individual man ; it planted his feet upon a rock ; it conferred upon him an inde-feasible dignity, which no worldly greatness could increase or accidents of social position diminish. Unhappily the Church of Rome rebuilt that middle wall of partition which the Apostle declared to have been broken down. They asserted that there was no common highway between this world and the next. That light from other worlds, which St. Paul spoke of as illuminating the souls of men in virtue of their humanity, was

intercepted and absorbed by an interposing priesthood. *They* could impart, or they could withdraw it, as they pleased. The keys of heaven were in their possession, and at a word from them the whole world might be cast into the outer darkness, whence the Apostle affirmed it to have been delivered for ever. Every one knows in outline the dreary tale that follows ; until half the nations of Europe, impatient of this godless tyranny, flung away the ecclesiastical chains which bound them. We are so familiar with the fact which is vaguely called 'the Reformation'—so bewildered with endless investigations into the motives which historians have supposed to actuate the various actors in these transactions, that the spiritual significance of the changes wrought has well-nigh escaped us. We have begun to be doubtful if there was any earnestness, any sincerity of purpose anywhere. Historians, whose books are mostly filled with the records of war and the devices of statesmanship, have seemed to attribute a far greater share of the revolutions effected in the world to such agents than is rightly their due. They have taken little or no account of those vast social forces—those national convictions and opinions, which, gathering into themselves from age to age the knowledge and experience of the past, knit together the generations by ties which are not less real because they are intangible and invisible. The truth which one age sees but dimly and afar off, assumes a clearer aspect to the next, and influences the character and the conduct of a wider circle. These growing states of opinion are the true pioneers of this world's progress ; these are those vast social forces which move on in their majesty and might, despite of the tumultuous proceedings of kings and statesmen. The politician who adapts the framework of government to the changes of society, may have no higher motive than to keep his place at what Carlyle terms 'the spigot of taxation,' but the changes which compel those modifications are the result of veritable convictions. Such was the case in England on the accession of Elizabeth. Men had cut themselves asunder from their old moorings, and floated out into a sea of speculation and conjecture. Authority, to which the force of custom had constrained a show of deference long after its living power had departed, had been finally discarded, and declared to be a sham. Men felt once more, as in the first days of Christianity, that there was a divine element in the life of every human being, which popes and priests had neither the power to give nor to take away. The discovery of a new world,

made them more fully conscious of the noble destiny before them, by affording them a wider field for their exertions. The *renaissance* of classical literature raised to its height the imagination already awake and stirring, and at the same time revealed the form in which all this seething mass of hopes and aspirations, new found convictions, thoughts and speculations, might most fittingly find expression. There was everywhere a mighty impulse, an increased activity of intellect ; but still, as it were, without form or definite shape ; and in the poetry of the old dramatists we discern the of power the new era, in that very want of order and proportion which defaces their works, in the unreasoning profusion with which their intellectual gifts are lavished, not less than in their passionate delineations of human nature.

Again, the conditions of social life in the time of Queen Elizabeth were far more conducive to the production of a marked individuality of character than we can readily conceive at present. Men were sudden and quick in strife. Man's life was beset with dangers. He walked on the brink of peril. Wars of religion carried out with a terrible ferocity had hardened the hearts of men, and by sheer force of familiarity deprived death of its singularity and half its horrors. As Heywood puts it in one of his plays, "it was no world in which to pity men." Those scenes of revolting horror, which the old dramatists so constantly bring before us, are not so far removed from the actual facts as we are apt to imagine, judging by a nineteenth century standard. The ravages of the plague, the poisoned chalice, battle, murder and sudden death, are the common topics of their poetry, because they were (comparatively speaking) the common occurrences of the time. A modern poet, attempting to delineate such tempestuous extremes of passion, must draw from imagination only. He must live, in his own person, the humdrum life which civilization metes out with an equal hand to all. But an Elizabethan poet wrote of that which he knew. He had only to look round him, and find his materials ready for use. Marlowe was stabbed to death in a tavern brawl ; Fletcher died of the plague ; Jonson was a soldier of distinguished courage. What a school for a dramatist do these few facts indicate. It can be only from feeling or from observation, that he can write at all. Genius, we must always remember, is a means to an end ; it is not an end in itself. It is a certain cast of mind, which enables the possessor

to turn knowledge to good account ; but it does not permit him to dispense with knowledge, or forego the labour of acquisition. The greatest genius the world has ever seen must, to accomplish his mission, add the world's experience to his own ; he must meditate deeply on the records of humanity ; he must grasp at every species of knowledge which comes in his way. Such a man was Shakespeare. There must have been in him a beautiful serenity and clearness of vision, before he came to write his greater tragedies, but we may rest assured that he did not acquire that insight and knowledge by any supernatural mode of intuition. He must, like every earnest man, have had to face and fight 'the spectres of the mind.' He must have known the burden and the mystery of all this unintelligible world. He was "no mere child of nature ; no automaton of genius ; "no passive vehicle of inspiration, possessed by the spirit, not "possessing it. He first studied patiently, meditated deeply, understood minutely, till knowledge became habitual and intuitive, wedded itself to his habitual feelings, and at length gave birth to that stupendous power, by which he stands alone, with "no equal or second in his own class."

Neither may we forget that how great soever may be the original force of a man's mind, he still must be, to a great extent, the creature of his time. He must be moulded according to 'the form and pressure' of the age in which he lives.

We dislike exceedingly the modern philosophical conception of history, which seems to regard the past ages of the world as so many strata of humanity, laid down for the especial benefit of the present one ; and the present as a sort of myriad-handed automaton blindly working in obedience to some immutable law of evolution, originating no one knows where, and tending no one knows whither. The notion, too, that we shall ever be able to predict the future with any approach to accuracy appears to us as wild an idea as ever entered into the heart of man, for this reason (among many others which we need not specify in this place) that the appearance of a man like Shakespeare is a break in the chain of sequences, which can never be accounted for—far less predicted. It is the introduction of a new element in the world from utterly disproportionate antecedents, and therefore a miracle in the strictest sense of the term. There is an undeniable fascination in the thought that we may at some future time penetrate to the secret causes of these phenomena, and thenceforth, we suppose, produce our great men artificially

when we want them, as we hatch our eggs by machinery ; but at present the notion seems to us a very chimerical one. At the same time the environments of his time must of course furnish the materials wherewith a man has to work ; must give the direction to his powers, and mark the scope and character of his life. The Elizabethan poets were dramatists because the conditions of life in their day were eminently favourable to the production of a marked and striking idiosyncrasy in themselves, and in other men. The passions of the individual for evil or for good, were less under restraint. Society was still but partially organized, and men and women were oftener placed in situations which develope the extremes of virtue and vice. Every military man who has taken a part in active service and cultivated ever so little his faculties of thought and observation, must have perceived with what a broad clear light the hardships and the perils of a campaign illuminate some of the highest as well as the lowest aspects of human nature. He must frequently have been startled at the revelation of strange thoughts and emotions in the depths of his own mind, which, but for some such searching influence, might have remained through life unknown even to himself. He must have felt the striking difference between hearing of such things and actually beholding them. It is such mental experiences as these, which give its peculiar charm to a life of adventure, whether as a soldier or a traveller ; and it seems to us, that in the days of Elizabeth the ordinary social life had very much of this character. Accordingly, by way of natural consequence, the poets of the age were impelled to the delineation of those extremes of passion, which, like the wind upon a troubled sea, agitated the hearts of men.

The present century began amid the agonies and throes of the French Revolution. With its centre in France, the shock of that tremendous convulsion vibrated through the whole of Europe ; everywhere unsealing new springs of thought, and awakening a renewed intellectual vigour. As at the time immediately succeeding the Reformation, here in England the muse of poetry awoke from a long sleep, and one poet and then another joined the company of singers, the notes of whose music is still taken up and prolonged into these days. In earnestness and depth of thought and feeling, the writings of the present century may fairly claim a place beside those of the Elizabethan era. The differences between them are

differences of kind, rather than in degrees of merit. The ancient poetry was objective and dramatic ; the present, lyrical and subjective. We have already suggested certain causes which seem to us to explain the first phenomenon. Can we account equally well for the last ?

The Reformation was a rebellion of the human intellect against spiritual authority. It is a mistake to suppose that the Church ruled more tyrannically at that period than in any former time of her history. She had never been more inclined to allow people to think and act as they pleased, provided they would only permit her to retain the name and appearance of her old prerogatives. It is a poor and mean notion which supposes that that great insurrection is to be accounted for by a narrative of the abuses practised in the sale of indulgences. These may have been the accidental spark which produced the explosion ; but that explosion would never have taken place with such astounding strength, if the materials for combustion had not been long accumulating. The real cause was that the human mind had outgrown the beliefs which still maintained a nominal sway. Neither ecclesiastic nor layman had faith any longer in the reality of those spiritual pretensions, which for political and social purposes it was deemed advisable to acquiesce in. It was against this lie which Europe protested. The Reformation was the assertion that men, on matters which most nearly concerned them, would in fact exercise their own powers of thought and judgment. The immediate effect was a great and wonderful development of individual energy in a variety of ways. The 'ego,' as a modern metaphysician would term it, started forth like a captive set free, from the ruins of the great ecclesiastical organisation which had bound and cramped it so long. The delight of new found freedom, the consciousness of personal power, expressed itself, among other ways, in the production of dramatic poetry.

Every advance toward liberty which has since been made, has been only the legitimate development of the rights of conscience asserted by Luther and the Reformers. But they not only would not have admitted these applications of them, but fought against them with all their strength. In England, we had no sooner cast off the yoke of a live Pope than we manufactured a dead one in the form of thirty-nine articles, and attempted by means of pillories, thumbscrews and other devices, to compel people to conform to its opinions. In Europe the

Protestant sects anathematised and fought against each other, determined rather to perish than allow to others that liberty of judgment which each demanded for itself. Thus it happened that while the foundations of the medieval fabric of society were sapped, while the principle of authority had been contemptuously rejected, the caste distinctions which necessarily proceed from it were permitted to remain in full force. Kings had still "a right divine to govern wrong;" the aristocrat was still a being different in kind from the commoner; each sect distinguished for itself the heretic from the true believer, and whenever it had the power to do so, made the one feel the extreme inconveniences of heterodoxy. But the seeds of liberty and free thought had been sown and could not be eradicated. They worked as it were under ground. And from the accession of Louis XIV until the time of the French Revolution, more or less in all the countries of Europe but especially in France, there were two powers at work—the one continually advancing with the age, the other stationary. The divine rights of kings received their perfect development in the reign of Louis XIV. The State was the king, and the king the State. It was his part to govern; it was the part of the people to suffer and be silent. But side by side with this culmination of the medieval principle of authority, there proceeded an equally remarkable development of that principle of free inquiry, which had been asserted at the time of the Reformation. The French philosophers, cut off by the absolute power of the king from any direct participation in public affairs, could still discuss such matters abstractedly. And this they did with a thoroughness and absence of timidity, which have never been equalled. Unchecked by any sense of responsibility or any regard for consequences, they taught their countrymen to follow out abstract principles of thought to their extreme conclusions. If they did not themselves draw the comparison between what actually was and what ought to be, it was impossible that the students of their writings should not do so. As we remarked with regard to the Romish Church at the time of the Reformation, it is a mistake to suppose that immediately anterior to the French Revolution the government of France was especially cruel and oppressive. On the contrary, the upper classes were awakening to a sense of their duties towards the poor—were extremely anxious to do something for them. Their wants and claims were a theme of constant discussion. But it

was too late. The people to be benefited had no longer any faith in the power of kings and nobles to remove the ills under which they groaned. But they did believe with an ardent faith in the power of principles deduced from the pure Reason to regenerate mankind. It was the might of these convictions, which overturned the throne of France, and forced the aristocracy to abandon their place and their country. Some men, such as Burke, saw in its beginnings the issue of that great uprising, but to the young, hopeful and imaginative it was the breaking of the brightest morning which had ever arisen upon the earth.

Bliss was it in that dawn to be alive,
But to be young was very heaven.

We know the failure of those glowing hopes. The lesson which the events of the French Revolution brought home to all was, that in man there is a terrible perversity which can warp the highest aims and desires, and convert them into instruments for the perpetration of the most appalling wickedness. And it is the sense of a continual almost hopeless battle against evil, which breathes through the whole of modern poetry. In the Elizabethan era, life was recognised as a great good; there was no question about that; there was the same joyous sense of health, strength and novelty which marks the period of childhood. But in these modern days, we cannot frankly admit this. We are not certain whether after all an universal act of suicide would not be the best way of winding up the affairs of the human race. The study of the individual during his brief and petty career upon earth is of little moment with us. It is the destiny of the whole human race which torments and perplexes. How to construct society so as to counteract this terrible force of corruption which threatens to destroy it? How to arrange our checks and balances so as to repress the erratic tendencies of the individual, and at the same time secure to all a sufficient modicum of happiness to induce them to remain quiet? Since the dire experiences of the French Revolution, the tendency of both speculation and practice has been to rub down and polish away all eccentricities of character; to give to all the same artificial education, and one common stock of ideas. Men and women are compelled to cut themselves down to one regulation pattern. Life is hedged round with a multitude of conventional rules, all purely arbitrary, but which are regarded with as much reverence as

if they formed part of the Divine government of the universe. We do not remember ever to have seen an Englishman who considered a black hat a desirable covering for the head, either in the way of protection or of ornament. Still it requires no small amount of courage to defy public opinion so much as to desist from wearing this fashionable encumbrance. The man who does this, is regarded by his friends with considerable misgiving. He is held to be one, in the recesses of whose nature there are strange and violent forces—at present, it may be, resting in uneasy slumber—but liable at any moment to break forth with volcanic and destructive fury. And this uniformity which the dread of that unseen demon, Public Opinion, exacts from us in our external department, necessarily penetrates to the inner man as well. People cannot adopt outwardly a Chinese monotony of conduct, without being blighted with a similar monotony within. This loss of individuality is most markedly perceptible in that which most occupies our thoughts and conversation. We have become a nation of politicians and newsmongers; we are always talking of the destiny of races; nothing less than a nation is sufficiently large for our thoughts to grasp. But even here, there is nothing so odious to us as the presence of a man who declines to accept some political shibboleth, who will not shout with this or that mob, or prostrate himself at the feet of this or that party leader. Counting heads is the latest mode of arriving at absolute truth in the most delicate difficulties. The work of government is simply to ascertain the kind of action which is most noisily and most numerously insisted upon, and to follow that. A politician who will not sacrifice his convictions to his constituency or his party leader—a politician who tests measures and attempts to discover their character for evil or good without reference to the man who has brought them forward, is a traitor and an apostate; and even the great defender of individual liberty cannot refrain from doing his utmost to extinguish his political existence. The avowed intention indeed of the latest and most aggressive school of philosophers is to stamp out the last feeble sparks of individualism, or, as their leader has put it, “to grind down the recalcitrant elements of society” by means of a gigantic social organization, each member of which shall exactly resemble every other, like an army of perfectly drilled soldiers.

Whether these tendencies are good or bad, is a question which does not concern us at present. But there can be no doubt that

they are hostile to the creation of marked characteristics in the individual, or the play of any vehement emotion. Under these circumstances, it would be truly wonderful if our poets were dramatic. We have blunted those keen susceptibilities which the drama requires. We have lost the capacity to project our imagination into states of life regulated by no fixed laws. We cannot scan with nice scrutiny the idiosyncrasies of individuals, from an intimate study of which the dramatic genius derives sustenance and strength.

But (and this has always seemed to us the saddest result of our boasted progress) while we bore each other to death with grand talk about the rights of humanity, the wants of the labouring classes, freedom, education, and the like subjects, the human ties which knit men together—the touch of nature that makes the whole world kin—are becoming more and more lost sight of. Cash payment, as Carlyle has pointed out, has become the sole *nexus* between man and man. The truth expressed in a blundering manner in feudalism, has been swept away, as well as its abuses, and in its place we have that utterly inhuman system, which, under the name of Political Economy, is regarded as a justification of the grossest selfishness. We would guard ourselves against the suspicion of being ignorant haters of the science of political economy rightly so called. But the popular notion of political economy, or rather free trade, is an utterly perverted and mischievous one. It involves the denial of all duties between man and man. It regards it as a system of irresistible physical forces, which compel and justify the grinding down of wages to the uttermost farthing, the adulteration of food to the last point of endurance, because in the end things will find their level. It divides society into a number of hostile camps, who regard each other as natural enemies, in a much deeper and more lasting sense than ever in old times did the French and English. These are signs of the times which portend far greater evils than the failure of dramatic poetry—which suggest the question whether western civilization does not already topple on the brinks of that abyss, in which so many of its predecessors have disappeared for ever. But they are also hostile to the production of dramatic poetry, because they supersede the dictates of the individual conscience, and degrade human beings into mechanical agents of dead forces.

Again, there is that passion for organization, for reducing the whole universe to a system which shall grind out the results desired with the precision of Mr. Babbage's calculating machine. Every one who asks the attention of his countrymen, is expected to come forward with a book in which the whole compass of human knowledge shall be arranged, classified and accounted for. If he admits his inability to do this, he is contemptuously bidden to hold his tongue as manifestly behind the age. This mania for systems has been the besetting weakness of philosophers in all ages. "Their little systems have their day ;—they have their day and cease to be." They never last more than a few years. The heaviest blows against them are invariably struck by the constructors' most affectionate disciples. Still, undismayed by the fate of his predecessors, one philosopher after another presents himself,—seemingly confident that he has dug down to the very home and abiding place of Truth, and carried away the philosopher's stone which can solve all mysteries. But, at the present time, it seems to us as if this passion for the manufacture of systems had grown to an extent hitherto unknown. It threatens to invade every department of life, and cut out a man's career for him with the regularity and exactness of a Dutch garden. Only a short time ago, we heard a gentleman, apparently with the perfect agreement of his hearers, all of whom were highly intelligent and well-read men, lament the total want of organization which at present prevailed in the peopling of the earth. Such purely secondary considerations as love and personal liking had been permitted to influence a part of this world's concerns, in which scientific principles ought to govern, uncontaminated by anything less abstract and immutable. He looked forward to a time not far distant, when all this would be changed, and future generations born into the world with a strict eye to results scientifically ascertained beforehand—when, in fact, we should live exactly according to the rules laid down in Plato's *Republic*. It would be hardly possible, even for the imagination of Dante to conjure up the idea of a life so ghastly as this ; with no margin of uncertainty to render the monotony of existence endurable—no cloud-land on the far-off horizon, for hope and imagination to colour with their airy tints. We do not suppose that this millennium of abstract science is a whit nearer now than in the days of Plato. Human nature is still too strong to be enchained by the fetters of philosophers.

But if it be conceded that there is this tendency to abstraction—to merge the individual in the mass, then it is not strange that the spirit of dramatic poetry should find no resting place on our shores. For it is in every respect the opposite of all this,—it is with the individual, and not with the mass, that the dramatic poet must feel the liveliest sympathy. The arduous, the sublime task which he undertakes, is to create,—by the power combined of imagination, thought and sympathy, to pass out from his own being, and identify himself with men and women, cast in a mould different from his own, and having in all probability no counterpart in his experience. To create, we say, a new life, and that a life which is not a solitary study—something which can be abstracted from its surroundings, and weighed, measured, analysed and examined, systematically and at leisure,—but a life, full of stormy passions or of intellectual greatness, acting and moving among a number of other creations, as instinct with animation and power, as true to nature in their differences and their samenesses. The dramatic poet must identify himself with each and all of the creatures he has called into existence. He must pass from one to another, “swifter than meditation or the thoughts of love.” He must be keenly awake to all those revolutions of feelings which a word, a touch, a momentary glance, can produce. He must be able to clothe his thoughts in the language of feeling, burning as it were at a white heat, and yet in the very torrent, tempest and whirlwind of passion he must acquire and beget a temperance that may give it smoothness. He must “hold, as ’twere, the mirror up to nature ; to show virtue her own feature, scorn her own image, and the very age and body of this time his form and pressure.”

To state the qualities essential to the dramatic poet, is equivalent almost to stating why we cannot expect them now. The conditions of modern life, by affording no occasion for the play of these deeper passions, must in time deprive the greatest poet of the power of depicting them. The poet (let his genius be what it will) is still a man ; his heart beats in unison with the hearts of those among whom he lives ; his intellect and his affections are excited and touched by the same objects as theirs. His mind takes fire from its sympathy with the public mind and the manners of his age. He idealises and sublimates into song the thoughts, desires, fears, and aspirations of the voiceless multitudes. He transmutes, by the alchymy

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of genius, the ordinary life of the world into the pure ore of poesy. Just as Shakespeare may be said to have gathered up and expressed in his writings the very essence and spirit of his age, so in the writings of Tennyson and Browning we see a glorified reflection of ourselves. Absorbed as we are in endless discussions on the first principles of things—decomposing by the aid of powerful critical apparatuses most of what former ages conceived to be impenetrable granite, we have quenched that fever of the blood, that divine madness of the brain, which can alone give birth to tragedy. In the Elizabethan age life was new; men felt through every fibre of their being that that which men had done, was but an earnest of the things that they would do. We, too, feel this, but it is in a very different way. The discoveries of science, bring the individual no triumph, no exhilaration. They rather crush him, by the revelation of the atom which he is amid the immensities of the universe. Our poets can only, in a thousand different voices, ask passionately for "Light, more light!" Every faculty seems absorbed in attempting to wring out from the depths of the eternal silence some clear answer to the whence and whither of the human race. The single life has become too shadowy, too attenuated to evoke that joy and exultation in all its forms and manifestations whence the poets of the Elizabethan era drew their inspiration. We must feel the ground firmer beneath our feet and the prospect clearer and brighter ahead, before our poets will cease to sing of the doubts and fears, the dim hopes and aspirations, which possess them as individuals.

ART. VI.—PUBLIC RECORDS AND STATE PAPERS.

IN every civilised country the progress of national enlightenment and culture has been attended and indicated by an increased care of the public archives and other national and historical monuments. In every age of modern European history, that country which has been most distinguished for its liberal or skilful government and for the intelligence of its people, has also possessed the most careful and scientific Record administration. The improved methods that have characterized, in most branches of research, the civilization of the present century, have been nowhere more evident, or attended with more interesting results, than in the labours of archivists and the investigations of students of Record literature. Nearly every European Government has for some centuries possessed its stores of State Papers, suitably lodged, studiously guarded from all possible dangers, and under the care of scholars trained to the work ; it has been reserved for the enlightenment of the last thirty or forty years, and for the judicious liberality of living statesmen, to provide for the accessibility, and consequently to render possible the utilization, of these rich stores of learning. It is thus that genealogy, topography, statistics, legal and constitutional history, and kindred subjects, are now no longer the mere hobbies of antiquarians or *dilettanti* ; above all, it is thus that History is no longer the domain of pleasant storytellers, as it was from Froissart to Hume and Smollett—it is an accurate and precise science that we study in the pages of Hallam, Ranke, and Froude. To use the words of Professor Ranke, “we shall no longer have to fund modern history on “the reports even of contemporaneous historians, except in so far “as they were in possession of personal and immediate knowledge of facts—still less, on works yet more remote from the “source ; but on the narratives of eye-witnesses, and the genuine “and original documents.”

Nor is it to men of letters alone that the liberal arrangements, adopted of late by most European Governments in Record matters, have proved of incalculable benefit. Public utility has been consulted in every way. The public money is hereby largely economised :—

First, by doing away with a great deal of that vast mass of printing or copying which must always be necessary under any administration which does not possess the machinery of a Record department.

Secondly, by avoiding that waste of the valuable time of ministers and other highly-paid public officers, which must always occur when documents for reference have to be searched for and selected either by the ministers themselves or their subordinates—the search being thus in either case conducted by presumably unskilled agents, and by a method that must be either extravagant or inefficient.

Thirdly, by avoiding the large unnecessary expenditure incidental to the separate custody of Records by the various great departments of the State. The immense convenience, for all purposes of reference, of a centralization of official documents is too obvious to need notice : its economy will be no less evident, when we remember that in this way the Records may be arranged in a regular and systematic order under the best possible conditions and in the least possible space ; the number of officers required may be reduced to the lowest amount, and the work to be performed may be carried on under the most efficient inspection, on the most approved principles, and at the least cost to the public. The staff which would be required for the proper management of ten tons of Records will probably suffice for the management of a thousand, and the cost of the arrangements for safe custody will be only slightly increased. A sporadic system of Record administration is as bad economy on the part of any Government, as would be the maintenance of a separate pay or postal establishment for each great department.

There are other advantages attending a centralization of Records and their liberal communication to the public, which we shall notice hereafter. It will be sufficient for our present purpose if we add to the considerations above noted—those, namely, of scientific utility and national economy—the justice done to that portion of the public which may have occasion to search the Records for evidence in the establishment or the defence of rights at issue in judicial or other proceedings, by affording convenience of access to, and consequently rendering possible a general acquaintance with, the contents of the public archives.

The chief uses of Records, and the main objects for which they are preserved, are broadly indicated above. We see that

the purposes for which searches have to be made, may generally be classified under three heads:—(1) searches for public or departmental purposes; (2) searches for legal purposes; (3) searches for literary or scientific purposes. It has been fortunate that the claims of the three classes of searchers to consideration and accommodation have been backed by the powerful financial arguments to which we have referred. At the present day these searches may be made, and these studies pursued, with great profit and with more or less convenience to the searcher, not only in the vast and imperial archives of London, Paris, Vienna, Berlin, Simancas, Venice, the Hague, Washington; but also in such small and apparently unimportant collections as those of Weimar and Dessau. Of these Record Offices, that in London is by far the most perfect and complete in all its arrangements, and the most frequented; and yet its cost, including that of the preparation of the numerous Record publications, is not more than about £22,000 per annum.

What has been done in Europe and America naturally suggests to us here, what might have been done, and what will at some time or other necessarily have to be done, in India. It is hardly creditable to the English rule that we have done so little to preserve or render useful the 'muniments of the nation and the people's evidences.' In well-nigh all the other departments of what Mill calls the optional functions of a government—and it is in these that judicious liberality and excellence of administration most notably demonstrate an enlightened and paternal rule—our intentions and endeavours have been highly praiseworthy; and the performance has been fairly equal to the promise. In popular education, in public works, in sanitation, in other beneficial provisions for the good of the subjects, many of which are of the most costly nature, our Government has striven hard to rival the most advanced nations of the West; whilst in all matters pertaining to the custody, the preservation, and the accessibility of our Records—matters on which will in a measure depend the verdict of posterity upon us, which are intellectually and socially of the highest interest and importance, and which even in a pecuniary point of view more than repay all the care that is necessary for them—we are put to shame by the example of the most obstructive Western Government. We believe that the present period of retrenchment and financial embarrassment is a peculiarly favourable opportunity for the discussion of this

question ; for it is possible that at such a time considerations of public economy may effect that for which scientific utility, convenience to statesmen, and justice to litigants, have hitherto pleaded in vain.

Nearly all the unanswerable arguments to which we have alluded, as proving the general advantages of a scientific centralization of records, apply with far greater force to India than to any other civilized country. Take first the ground of public economy. In no other country is the time and labour of high public officers so precious, in no other is it so necessary for them to rely as much as possible on their own observation and sagacity rather than on the judgment and discretion of their subordinates ; and yet under the present system, or rather lack of system, it is almost impossible for them to have much personal acquaintance with the records of their own offices, much less with those of other departments ; for this, a central repository and scientific calendars are necessary. There is probably nowhere such a wide and general dispersion of records as in India ; and the consequent waste of public money is very large, in providing suitable places of deposit for the various collections, in maintaining separate establishments for their custody, and in printing or otherwise procuring duplicates to be distributed amongst some or all of them. The expenditure of the various Governments in India on the item of printing alone, amounts to a prodigious sum every year ; and it is believed that a very large portion of this expenditure is incurred in exactly that kind of printing which would be rendered unnecessary by the provision of a single, well-known, commodious, and easily accessible repository of State Papers. The accuracy of this belief will, we think, be evident from a consideration of the facts given in the following statement, which we quote from the advertisement to the tenth volume of *Annals of Indian Administration*.

‘ The Governments of India publish, on an average, a volume every four days. From reports affecting the entire Empire to accounts of local drainage, from the opinions of the ablest officers to the cost of a cutcha by-road in a frontier province, everything finds a place in these publications. There is scarcely a subject connected with Indian administration, on which they do not exhaust official knowledge. There is no officer in the country who may not obtain from them, in reference to his special task, all the advantages of experience. The information thus vast is, however, widely scattered. The records of one Presidency are scarcely known in another. The

books are not very readily procurable, and above all they are, like all other blue books, dry, ill-digested, and overlaid with detail. It costs an hour to find a fact, and in India men who care about facts cannot spare hours.'

The truth of this statement is, we believe, notorious and incontestable. Out of the enormous mass of printed matter of this nature that is yearly issued and paid for by the Indian Governments, it is probable that a very large portion is hardly, if ever, used at all; another large portion is mere repetition, much of it being actual reprints of matter already printed in one or more of the numerous distinct series; whilst only a very small part can ever be extensively read or used. The very bulk, the numbers, the dispersion of these publications, forbid us to hope that their usefulness can ever atone for their costliness; and this fact affords us the best possible illustration of the combined economy and convenience of a system, which will do away with the necessity for the greater portion of this comparatively useless expenditure,—a system which, whilst it relieves heads of departments from the care and responsibility involved in the proper custody of their records, will provide for their security in the cheapest and most effectual manner, and will ensure the rapid and skilful selection of any documents that may be required for reference.

Let us take next the arguments based on scientific utility, and see how they apply in an especial manner to India. One of the greatest charms of the study of most Indian subjects should be afforded by the vastness of the yet unexplored field; but under the present conditions, this very vastness is the most serious discouragement to the student. There are hardly any means of ascertaining what has been explored and what has not; there are still fewer facilities for profiting by the labours of previous explorers. It is true that we may consult the *Proceedings* of the learned Societies, the pages of the *Calcutta Review*, and similar published sources of information; but when we have ransacked these, we have pretty nearly exhausted our stock of ordinarily accessible information. And yet it will be seen, from the account which we propose to give of the general nature of Indian records, that an infinitely larger and more original fund remains hitherto undrawn upon and concealed amongst the "Proceedings," the Correspondence with England, and the Memoranda and other miscellaneous records of the Indian Governments. If these vast mines of literary wealth were opened to the scholar, and rendered accessible by the skill

of expert archivists, a new and altogether clearer light would be thrown, not only on the general history of our empire in India, but also incidentally on every one of the thousand branches of study which occupy the attention of the historian, the antiquarian, the statistician, the topographer, the student of social or political science. We believe that in no country, possessing such materials for these literary and scientific purposes, has so little use been made of the national treasures; and this has been the case (in the face of a large amount of scholarly labour devoted to such subjects, and in spite of a considerable display of public interest in them) solely by reason of the difficulty, nay the impossibility, of obtaining ready access.

One of the most important functions of a Record department, and one which we have not hitherto noticed, is the scientific selection of useless documents for destruction. In England this task is entrusted only to the most experienced officers; the utmost care is taken in the selection; and, to ensure that no improper use be made of the condemned papers, they are all 'pulped' before they are handed over to the paper-makers who buy them. The importance of providing for the skilful performance of the task of selection will be obvious, when we remember the numerous points that have to be considered in deciding whether a particular paper shall be destroyed or preserved. These points are:—*first*, whether the paper may be required for official reference; *secondly*, whether it facilitates official reference to other papers; *thirdly*, whether it is concerned with any private rights or claims; *fourthly*, whether it deals with any points of public interest, scientific or otherwise; *fifthly*, whether it deals with any points of private interest sufficiently important to warrant its preservation; and, *sixthly*, all these considerations must be accompanied with a due regard for public economy, to prevent too lenient a view being taken of the claims of documents. This task is a specially important one in India. The expense of efficient custody, in a climate such as ours,* must always be considerable. The succession of office-holders is generally so rapid that, if the selection be

* A memorandum written by the late Mr. Piddington, noted by Mr. Torrens (then Secretary of the Asiatic Society) as a paper of very great value, and printed in the *Journal of the Asiatic Society* for July 1846, indicates some of the peculiar dangers to which documents are exposed in India; those resulting from the dampness of the climate of Bengal, from the ravages of the ant, the book-worm and other vermin, from decay, from mutilation and from fire, are sufficiently obvious.

entrusted solely to their discretion, it will go hard but that valuable papers will be destroyed by the impatience or inexperience of some, whilst the muniment-rooms will be needlessly encumbered by the excessive caution of others. Moreover the qualifications for the proper performance of such a task are not to be found in every officer : for these involve not only a knowledge of official requirements, but also a scholarly appreciation of the demands of science, a familiarity with the principles of documentary evidence, and some acquaintance with the private wants and wishes of searchers ; in fact, they appear to combine the qualifications of an official, a lawyer, and an antiquarian.

Dr. Hunter, in his able and eloquent *Annals of Rural Bengal*, has astonished most of us by his description of the literary and historic interest of the records even of a comparatively remote collectorate like that of Beerbhoom ; and he has himself proved that this description is not overdrawn by the specimen he has given us in his book of the value of his researches. And when such literary treasures have been unearthed amongst the distant archives of Beerbhoom, what may we not hope to find concealed in such offices as those of Burdwan, Dacca, and other well-known historical scenes ? Were none of the records of Chinsurah left by the Dutch in this country ?* Where are the Danish records of Serampore, and the records of the various Portuguese settlements in Bengal ?

* Since the above was written, the author of this paper has been enabled (by the kind suggestions of S. Wauchope Esq., C.B., and by the courtesy of the Judge of Hooghly who permitted a search in the Records of his Court) to obtain a partial answer to these queries. Many of the Dutch and Danish records of Chinsurah and Serampore respectively, are preserved in a large almirah in the Judge's Court at Hooghly. The Danish records appear to extend only from 1771 to 1845 ; but it is quite possible that a more careful examination might result in the discovery of earlier documents. The Danish name of Serampore was Fredericksnagore. It is curious to notice that the earliest records are in Danish ; subsequently they are written partly in Danish and partly in English, and sometimes the Danish and the English translation are in parallel columns ; while the latest records are in English with a signature in the Danish character. Mixed with these are some volumes that evidently belong to the English records of the Judge's Court.

The Dutch records originally deposited here, appear to have been both extensive and important ; but in 1853, the Dutch Government requested and obtained the transfer of all the important historical documents to the Royal Archives at the Hague,—an illustration, by the way, of the appreciation on the part of that Government of the scientific value of official records. The Governor-General acceded to the request, only on the con-

To the student of the history of this province, few fields of research would seem so promising as that which would be offered by the Portuguese archives; and the remains of these, unless they have been transported to Goa, may not improbably be found rotting in some Mofussil office.

It will however be surmised that all these scattered sources of information, which would become accessible by their centralization under proper management, shrink into comparative insignificance when we turn to the vast stores of the great Offices of State in Calcutta. We shall see presently, when we come to describe the contents of some of these repositories, that this surmise is probably correct; but for general, scientific or literary purposes these stores are under the present system hardly, if at all, more accessible than those of the most distant collectorate. But before proceeding to this description, it will be convenient to notice some recent manifestations of an appreciation, on the part of the Government, of the advantages that

dition that nothing of local importance should be taken away; consequently we may still hope to find much that is interesting among the volumes and bundles that are left, though many of them appear to be merely registers—*e.g.* of the Wills of the Dutch inhabitants of Chinsurah. It is to be regretted that the Government of India did not cause copies to be made of those documents that were sent to Holland; but copies may doubtless be procured from the Hague. A list that has been preserved, shows us the interesting nature of many of these files and series of volumes, which amounted to 66 different sets. Thus, there was a packet of papers, dated 1674, concerning the making over of certain premises at Dacca by the French to the Dutch: a packet, dated 1750, concerning some Dutch territory at Cossimbazar: two or three packets of ancient date, about the Dutch port of Pepley (or Piple, or Pettapoli) in Balasore: a packet containing copies of five Firmans from the Mogul Emperor to the Dutch, to trade in Oudh, Allahabad, and Agra. The question of the propriety of destroying all or some of the records that were left behind by the Dutch, appears to have been raised at the time of this transfer; for Mr. Torrens (who was then Judge) in reply to Mr. C. Beadon (then Secretary to the Governor of Bengal) regretted that a general ignorance of the Dutch language rendered impossible any thorough enquiry into the nature of the papers, and prudently recommended that *for the present* they should remain in the almirah.

These records appear to have been preserved as carefully as was possible in the entire absence of all modern scientific appliances; but most are worm-eaten and decaying, and many are in a state of inseparable cohesion. A few years more of neglect, and we shall certainly have few records of the last century left in India!

The Portuguese records of Bandel (their capital on the Hooghly) may probably be found at Burdwan, as Bandel formed a part of that district before the creation of the new district of Hooghly.

would accrue from a more scientific system of Record administration.

In 1865, certain suggestions for increasing the centralization of records were laid before the Government of India by Mr. Seton-Karr; and it is believed (though no results have ever appeared) that they were favourably received. These propositions were to the following effect:—

First,—That certain offices—*viz.*, those of the Government of India in the Foreign, Home, Military, Financial, Marine, and Public Works Departments, of the Government of Bengal, and of the Inspector-General, Medical Department—and no others, should be “Permanent Offices of Record,” in which all the series of papers, except such as were literally worthless, should be carefully preserved.

Secondly,—That the heads of all other offices in Calcutta, should be required to state what average period of their records they would, each of them, require to retain for the punctual and effective discharge of their current business, and immediately to remove and dispose of all papers anterior to such limits, as well as to provide for the removal of the same in future.

This scheme, unless it was merely intended as a step in the right direction and to prepare men's minds for a more comprehensive measure of reform, appears to us to have been of a somewhat unpractical nature. The immediate official inconvenience and perturbation would probably have been considerable, whilst the real reform would have been so partial as to be insignificant. A small saving might have been effected in the matter of printing; and it is possible (though hardly probable) that the cost of custody might have been slightly diminished; but here, as far as we can judge, the advantages of the plan would have ended, whilst its disadvantages and the difficulties in its execution would have been very great. In the first place, the propositions extended only to the records in Calcutta—and even here, presumably not to the judicial and similar records; no provision was made for the records of mofussil offices and courts in Bengal, not to speak of those belonging to other Provinces or Governments. In the second place, if records are to be distributed amongst a number of offices unprovided with any special machinery for securing their preservation and accessibility, (and the cost of providing such machinery for each one of the offices named would be so enormous as to put *that* alternative

out of the range of possibility), it seems a matter of little importance whether the Offices of Record are to be eight in number or whether they are to be twenty ; whilst the inconveniences would be numerous, both to the offices deprived of their papers, and to the offices saddled with a burden for which they would probably be unprepared. It would certainly be very hard upon the departments not included in the above list, if they were to be compelled to hand over their records to an office probably more or less unfamiliar with the nature of the documents, with no security (or hardly any) for their future arrangement or accessibility. In short, this scheme, though a step towards centralization, would have been such a short one as to have been worse than useless : it appears to labour under all (and more than all) the small difficulties that would beset a great Record reform, without possessing any of its official, public, or scientific utility.

An earlier and much more promising manifestation of the warm interest felt by Government in this question even on scientific grounds, was the appointment of a Record Commission ; but herein from the very first there seems to have been a very general misapprehension of the true functions of such a commission, which should confine its attention strictly to the three-fold task of (1) securing the preservation of all valuable documents by the most scientific and economical method, (2) selecting with every precaution the useless documents for destruction, (3) ensuring the perfect accessibility of every document by means of suitable calendars and indexes. The work of publishing records of antiquarian or historical interest is quite an after-consideration, and belongs to an era in Record literature much more advanced than that which is indicated by the present state of our Indian records. This work is the proper function, and may usually be left to the care, of learned Societies like the English Historical, the Camden, and similar institutions. It is not probable, in a country like India, where men of letters are also generally busy men, that much can be done in this way by individual enterprise ; but it can hardly be doubted that, if the Government will only take measures for opening the records to the learned world, Societies will spring up to take advantage of this liberality, as enthusiastic and as munificent as the English clubs just mentioned. These principles have been firmly established in England ever since the collapse of the Record Commission in 1838 ;

and in France and generally over the continent of Europe ever since the celebrated note on French Record administration in connexion with the works of the *Académie Royale des Inscriptions et Belles Lettres* and the *Société de l'Histoire de France*, written by M. Guizot when engaged as Minister of Public Instruction, in the consolidation of the department now known as the *Archives de l'Empire*. But they appear to have been entirely ignored by the Calcutta Record Commission, which has spent considerable sums of public money in printing works, which—supposing that their publication is in itself desirable for scientific purposes, and supposing that the interest excited by their contents is not sufficient to procure such a large sale as might remunerate private publishers—at all events fall rather within the scope of a curious or scientific Society than within that of a Board responsible for its expenditure to the Government. But the mistakes of the Board have been even more glaring in their omissions than in what they have done. It is true that on this point we are in the dark as to whether the Commission is to be blamed for not taking certain measures, or the Government for not allowing it to take those measures. Fortunately, it is not our province here to apportion this blame, and consequently we may state our unfavourable opinion with the utmost freedom—the more so, because it will be obvious to those of our readers who are acquainted with the great talents and high reputation of the public men referred to, that our strictures can have no personal direction, either against any members of the Commission, or (least of all) against their exceedingly able and overworked Secretary, who appears, first and last, in Calcutta and in Madras, to have done as much as any man living towards the elucidation of Indian records. But it can hardly be denied that, as far as the public can judge from results, the Commission has done scarcely anything on those points where its action was most needed. Our records are still stored in very numerous and very distant repositories; we do not hear of any new and scientific method of arrangement which would render them more accessible to the statesman and to the public at large; we do not hear of the construction of any fire-proof and damp-proof buildings, much less of the adoption of any of the precautions devised in London and elsewhere against rot or the ravages of vermin; we do not hear of any valuable documents or series of documents rescued from the jaws of destruction by the archivist's art; above all, we do not

hear of the establishment of any search-room with its paraphernalia of conveniences for the searcher and the student, its elaborate indexes, and its carefully edited calendars.

We cannot but think that the neglect of these, the cardinal points of Record administration, is to be attributed simply to the fact that the importance of attention to them has not been hitherto sufficiently recognized in India; and that this is so, appears almost certain, when we remember that the Government counts amongst its most prominent members more than one scholar whose antiquarian and historical tastes are highly cultivated and well known; and that at the head of all is a statesman who, by the establishment of the splendid and commodious Irish Record Office in 1867, has done more for the encouragement of archæological and historical research in the British Empire than has been done by any one since the passing of Lord John Russell's Record Act of 1838.

We proceed now to give some account of those records which may be considered to be in an especial manner the Public Records of India—the records of the Government of India. We shall here make free use of three most valuable memoranda which have fallen into our hands (we are not aware that they have ever been made public), apparently prepared for the use of the Record Commission by Mr. Talboys Wheeler, the late Secretary. These memoranda are drawn up in the most able and scientific manner, and fully justify the Government in its choice of a secretary for the Commission. They are such as we should expect from the pen of the clever historian of India—the skilful *littérateur* whose work on the War Office Records, stored in the dusty presses of Greenwich Hospital, received the special approbation of the Treasury, and whose *Handbook to the Madras Records** attracted the personal notice and commendation of the then Secretary for India, Lord Halifax. The singular merit of these memoranda warrant the belief that, if Mr. Wheeler's duties at the Foreign Office had been less onerous, and if his energies could have been more concentrated on the work of the Record Commission, the history of the latter body might have been a more prosperous one, and its results more satisfactory.

The earliest of these Notes is dated 1862; it is called simply a "Memorandum on the Records of the Government of India,"

* Published in 1860.

and is addressed to the Record Commissioners by Mr. Wheeler, apparently before his official connexion with them. It refers exclusively to the great departmental records of Calcutta; and mentions neither the local records scattered over the various provinces of India, nor such semi-legal records as those of the Registration department (which appear to be very similar in character to the various highly important series of enrolments that are preserved in the English Record Office), nor legal records such as those of the High Courts.

Mr. Wheeler classifies the whole body of Indian departmental records, (1) according to their nature or characteristics, (2) according to their age, (3) according to the departments to which they belong. He subjoins certain recommendations which, as they merely refer to questions of printing now probably obsolete, we need not notice further than to remark that there are two obvious objections to the recommendation that the General Letters should be printed before any calendaring is proceeded with: the first objection is the general one, urged above, to any printing *in extenso* by Government—at all events as long as much calendaring remains to be done; the second is the one particular to this case, that the General Letters are preserved amongst the records at home, and are consequently both secure and accessible. We now quote Mr. Wheeler's specific classification of these records.

‘The whole mass of Indian records, vast as it unquestionably is, may be divided into four classes, as follows:—

- 1st. Diaries or Proceedings, sometimes called “Consultations.”
- 2nd. General Letters.
- 3rd. Miscellaneous—*viz.*, Special Proceedings, Returns, Reports, Journals, &c.
- 4th. Accounts.

1st. *Diaries or Proceedings.*—From the earliest period of British settlement in India, each factory was accustomed to keep a diary of its proceedings, in which every transaction, every consultation, and even minutes, letters, petitions, and resolutions, were all duly recorded *in extenso*, and of which a copy was sent home every year. This diary is now represented by the volumes called *Consultations* or *Proceedings*. From about the middle of the seventeenth century down to about the middle of the eighteenth, Surat, Madras, Calcutta, Bombay, appear to have each prepared one diary volume per annum; but about that date our empire began to commence, and new departments were subsequently created, each having *Proceedings* of its own, until the aggregate number of volumes increased something like fifty-fold.

2nd. General Letters.—In addition to the Proceedings are the General Letters. The yearly ships from England originally brought out one General Letter from the Directors, and carried back one from the settlement. The historical and literary value of these General Letters has been very much overlooked, and does not appear to have attracted the attention of the Calcutta Record Commission. Those from the Directors were mostly penned by that class of experienced and practical men of high intellectual powers, who attained their position by sheer force of genius, but who, until a comparatively recent period, were more anxious to secure private fortunes than to acquire literary or political fame. On the other hand, each General Letter sent home formed a lucid summary or précis of the year's proceedings under appropriate headings. In fact the "To England" letters might be called *Calendars* of the Proceedings volumes, only that they are infinitely superior to anything that could be drawn up in the shape of calendars now-a-days; being written under the immediate eye of the President of Council, with the utmost brevity and clearness, and with an intimate and exhaustive knowledge on the part of the writer of the whole of the subject-matter of the Proceedings of the year in question, as well as of previous years. At the same time the "From England" letters embodied the views of the shrewdest men in England upon the transactions of the year; and frequently combined a purity of language and vigour of thought and expression, which are almost without a parallel in English prose literature.

3rd. Miscellaneous; viz., Special Proceedings, Returns, Reports, &c.—The other documents deserving of notice consist of *Special Proceedings* as regards secret or peculiar cases which were not brought upon public record; Special Correspondence of a like character; Returns and Reports as regards trade, revenue, or foreign relations; besides a number of Journals, Political Narratives, Memoranda, Minutes of Committees, Registers of Grants, Memorials and Petitions, Histories of old Hindu families, and other similar documents whose titles alone will indicate their subject-matter. In addition, however, to the foregoing, I may mention a vast mass of rubbish, generally in the shape of office books, obsolete memoranda about the receipt and despatch of letters, and similar documents, which can no longer prove of the slightest utility, and which nothing but mere sentiment would induce a private individual to preserve.

4th. Accounts.—This class of documents needs no description.'

From the later memoranda—one on the Foreign Office Records dated 1865, and one on the Home Office Records dated 1868—we are enabled further to illustrate these classes. The

Foreign Office records and those of the Home Office, whilst they mutually supplement one another for historical or scientific purposes, are of course widely different in their general nature. The latter comprise "the history of British administration from the days when the Company only occupied a small territory for commercial purposes under sunnuds from the Mogul," to the present day when the supervision of the Home Office extends more or less over the whole of British India. The former, on the other hand, comprise "the political history of India from that critical period in the rise of British supremacy when it became necessary to separate the foreign administration from the home."

In the Home Office, the Proceedings only date from 1752; the General Letters to the Court of Directors commence with the year 1748, or six years before the siege; and those from the Court to the Bengal Government only begin with the year 1753. The condition of the Bengal settlements immediately before and after the battle of Plassey is admirably set forth in a despatch to the President and Council at Fort William, dated 3rd March 1758. In the General Rules, Instructions, and Orders, which were communicated in this despatch to the Government of Bengal, the Court, after declaring the necessity for reform, reviews in detail both the condition of the zemindary, and the measures which are proposed for its better administration. It prescribes what shall be the future procedure, both civil and criminal; it defines the duties of the police; it abolishes certain farmed revenues, and in their place substitutes a system of fixed customs both by land and on the banks of the river. It also prescribes the way in which the books shall be kept; and enters into a number of other details, which will be found to indicate with tolerable clearness the internal condition of the settlement at the period to which it refers.

A long and interesting despatch from the Court of Directors, dated 22nd December 1785, furnishes a similarly exhaustive review of the Bengal establishments at this later date. These two despatches are printed almost at full length in Mr. Wheeler's memorandum on the Home Office Records, and they admirably illustrate the value of these documentary treasures; without doubt, there are numberless other literary gems of a like important nature, that still remain to be unearthed. Mr. Wheeler indicates one most valuable series, of which he promises an investigation: he tells us that the Proceedings, Minutes, General

Letters, and other correspondence connected with our relations with Java from 1812 to 1817 are preserved at the Home Office in 33 volumes.

The Home Office, or Public Department, originally contained all the Government Records from the earliest period of British rule; and these records have been preserved here to the present time, except those which were removed when the Foreign and Financial departments were created (the former in 1783, the latter in 1843), and when the Bengal Office became a separate department under the Bengal Government in 1843. Most of these Proceedings prior to the middle of the last century were destroyed at the capture of Calcutta, and the existing series only commences in 1752. This series is preserved in duplicate; for the original papers are copied or printed in volumes, and then stowed away in bundles. In the old Public department, the Proceedings and home correspondence were recorded under one head; but in later years it became necessary to separate the records under eleven different heads or branches, namely, Public, Commercial, Separate Revenue, Law, Ecclesiastical, Judicial, Revenue, Legislative, Marine, Education and Electric Telegraph.

The Foreign Office was originally a Secret Department, having no substantial existence prior to the year 1783, when it was created by Warren Hastings in consequence of the vast increase in the secret and political branch of the administration in connexion with the wars against Hyder and the Mah-rattas. But the Secret records prior to the establishment of the department, which are preserved here, appear to be of the highest historical importance. The proceedings for 1758-59 throw much light on the period of Clive's first administration, particularly in the history of the abortive attempt of the Shahzadah (afterwards the Emperor Shah Alum) on Behar, which resulted in Clive's obtaining the gift of the *jágír* of Calcutta from Mír Jaffier. Mr. Vansittart's administration, the early forgeries of Nandakumár, the Patna massacre, the dethronement of Mír Kásim and restoration of Mír Jaffier, the administrative reforms of Clive's second reign, the administrations of Verelst and Cartier, the proposed establishment of a trading capital in the Eastern Archipelago to consolidate the trade of China and Eastern Asia, the early events of the administration of Warren Hastings, are all vividly illustrated in the minute detail of these official and contemporaneous documents. The policy recom-

mended by Clive is most clearly set forth in a very able State Paper recorded by him on the eve of his departure for Europe in 1767, and will be found entered at length in the Proceedings of that year. This policy is again in turn criticised by the Court of Directors in a General Letter dated 20th November 1767, wherein they declare that they discern in it "too great an aptness to confederacies or alliances with the Indian Powers;" and again in 1768 they say "we entirely disapprove the idea adopted of supporting the Soubah of the Deccan as a balance of power against the Mahrattas; it is for the contending parties to establish a balance of power among themselves."

The history and successful issue of Hastings' foreign policy is described in his secret despatch respecting the peace with the Nagpore Mahrattas in 1781. It is a complete historical narrative, and enters into all the particulars connected with the great confederacy of native Powers, which about that time had so seriously threatened the English Company.

Since the creation of the "Secret and Political" Secretariat by Warren Hastings down to the present day, the extent and nature of the business transacted in the department has undergone but little alteration. From the very first the Proceedings are classified in three distinct series—(1), Secret; (2), Political; (3), Foreign. The first head, of "Secret," comprised the records of all Government transactions connected with wars, negotiations and missions. The second head, of "Political," comprised all ordinary correspondence with residents and agents in native territory, managed territory, and non-regulation provinces. The third head, of "Foreign," comprised all transactions between the Government of India and Foreign European powers. The "Secret" records extend from 1784 to 1858, when this Department was abolished by the order of the Select Committee; whilst the "Political" and "Foreign" extend as separate series down to 1842 only, when they were amalgamated by Lord Ellenborough.

A class of records peculiar to this department, and one which at first sight would appear to be of considerable historical and scientific importance, is that which consists mainly of the diaries of Political Residents and Agents; this class, however, (which in 1865 comprised about 150 maunds of papers) is condemned by Mr. Wheeler as worthless, on the ground that "all particular incidents are specially reported to Government and brought on record in the Proceedings."

This reason, though it does not seem quite conclusive, serves at all events still further to exemplify the immense value of these Proceedings.

The "Miscellaneous and separate records" of the Foreign Office are shewn by Mr. Wheeler to be of extraordinary importance; and yet with regard to their condition he states that

'These documents are at present scattered over the Record-room, and the existence of very many of them was apparently unknown in the office until they were taken out and examined for the purpose of drawing up the present report. Many of them are in a confused and shattered state, and are now being bound in the office under the superintendence of the Record-keeper.'

It is impossible in this place to do more than select one or two specimens from Mr. Wheeler's detailed descriptions of these records; but these specimens will indicate the probable value of the rest.* Thus, five thick volumes of office notes and memoranda extending from 1767 down to 1816, contain scores of such interesting papers as these—"Memorandum of the state of politics in India in 1793," "Account of the origin, progress and termination of Captain Kinloch's expedition to Nipal (1767)," "Account of Bundelcund and its rulers (1802)," "Account of the rise of the Mahratta Chiefs (1802)." Again, fourteen large files of letters, many of them of a confidential character, and extending from 1816 to 1840, comprise a large number of letters written with the utmost freedom by all the Indian statesmen of the period, including Malcolm, Metcalfe, Adam, Maddock, Macnaghten, Elphinstone, Ochterlony, and the different Governors-General, and referring to nearly all the political measures and missions in agitation at the period. Again there is a large collection of old treaties with the Dutch, which apparently comprises all those which have been concluded in the East from the 17th century downwards. Again, there is an interesting and comprehensive document entitled "An Abstract of the Political intercourse between the British Govern-

* We believe that a few of the notes and memoranda preserved amongst these Miscellaneous Records have been from time to time communicated by the department to the Asiatic Society, and may be found printed in the Society's *Journal*. Of this nature seems to be a paper in vol. x, pt. 2: "Extract from a Report on subjects connected with Afghanistan, by Dr. Griffith. Communicated to the Editor from the Office of the Political Secretariat of India." Many similar instances of communicated papers might be quoted.

ment and Oudh from 1764 to 1836, by Captain Paton, Assistant to the Resident, Lucknow; with an appendix containing copy of a treaty in 1801 with the Nawab Vizier Saadut Ali, and a Minute on the affairs of Oudh by Lord W. Bentinck, dated 30th July 1831."

The above account is of course merely a suggestive sketch in outline, and can by no means pretend to be even a partial description, of the contents of the more important metropolitan archives. We have given it in the hope of attracting more attention to these historical treasures than has as yet been accorded to them, rather than with any idea of being able, within the limits of a paper like the present, to afford any assistance to the student or the searcher. The same purpose may perhaps also be served by indicating briefly the results obtained by the comparatively slight enquiry that has already been made into the subject-matter of the Indian records preserved at home.

These papers are of course mainly found in the muniment-room of the India Office; but a large number, especially for the earliest period (1513—1616), have to be looked for in the Public Record Office and in the British Museum. In the Court minutes of the East India Company for July 6th, 1607, we find an order recorded that "all letters received from the Indies, and the answers, are to be entered in a book." Again on October 6th, 1609, "all letters to and from the Company, and other material writings to be coated and kept in a register, ready for every occasion; power is given to the Governor to hire a fit man for that business." Francis Sadler was accordingly appointed a sworn servant of the Company for this purpose; and to the early solicitude of the Court of Directors on this score may be ascribed the completeness, notwithstanding many losses, of the Indian home-records.

The Court Minutes and the Correspondence of the India Office records will be seen to answer more or less to the Proceedings and the General Letters of the Calcutta records; aided and illustrated by the miscellaneous records of the Office, and the kindred papers in the Public Record Office and the British Museum, they form a complete collection, "and will be found to contain materials for a most complete history of the subjects embraced." The task of rendering this collection accessible has been assigned by the Treasury to some officers

of the Record Office, under the direction of the Master of the Rolls and Sir Thomas Duffus Hardy. Mr. Noel Sainsbury is the responsible editor; and, judging from the manner in which the earlier portions have been calendared, and the intimate acquaintance with the subject which is displayed in the learned preface, the Government could hardly have made a better choice. The preface is probably the most important contribution to an accurate and minute knowledge of the origin and early progress of English enterprise in the East, that has ever been given to the public.

The most important subjects, of those which are more particularly illustrated in the papers that have already been calendared by Mr. Sainsbury, are the early voyages for the discovery of a north-east or a north-west passage to India; the establishment of the East India Company; the various successes of the early voyages to the East Indies; an account of the settling of the different factories, with the gradual development of the lasting influence of the English in the East; the commencement of a commercial intercourse with Persia; the first faint attempts at establishing a direct trade with China; the opening of a communication with Japan through a series of adventures as romantic as the history of Robinson Crusoe; and the progress and decline of that trade.*

Amongst these documents are preserved some which relate to the voyage set forth by Sebastian Cabot, who obtained letters from Edward VI to "the kings, princes, and other potentates inhabiting the north-east parts of the world towards the mighty empire of Cathay." But after the accession of Elizabeth, and especially after the defeat of the Spanish Armada, we get a vast mass of letters, memorials, observations and arguments, written by persons anxious to participate in the glory and the profit of these hazardous adventures. Gylberte, the champion of the north-west passage, wages a fierce paper-war with Jenckynson, the champion of the north-east. The numerous voyages of Frobisher, Waymouth, Hudson, Button, Bylot, Baffin and others, are already well-known, chiefly through the writings of Hakluyt, Purchas, and their many imitators; but the original correspondence calendared in this volume gives us a far clearer insight into the interesting details of the adventures of these pioneers of commerce.

* These Japanese papers were described in the *Calcutta Review* for April 1869.

In October 1589, less than one year after the defeat of the Armada, we find a body of English merchants petitioning the Queen for permission to trade directly with India; and from this time the letters become very numerous and of the greatest interest to students of Indian affairs.* All the minute details concerning the grant of the first charter in 1600 are here given; as well as all the correspondence with Surat, Agra, Ajmere, Ahmedabad, and Baroach, the factories on the west coast of India—with Masulipatam and Pettapoli on the east coast, with seven factories in Sumatra, with four in Borneo, and four in Java, with Macassar in the Celebes, and with the various trading stations in Malacca, Camboja, Pegu, Siam, Cochin-China and Japan.

From what we have here said of the contents of the earlier portions, it will be seen that the Indian records preserved in England are of the highest historical importance. We think that their value will be still more apparent, when we possess a calendar of the documents of the later period immediately preceding the siege of Calcutta in 1756; most of the original Indian authorities having been destroyed by Siráj-ud Daula.

We believe that we cannot better conclude this paper than by giving some account of what has been done for records and record-literature in Europe, and especially in England.

From the time of Richelieu, the French government has manifested the liveliest solicitude for the safety of the national archives. As far as Richelieu himself was concerned, this care probably arose from political rather than scientific motives; for we hear of his perpetrating the vandalism of destroying all the records of the English rule in Normandy on which he could lay his hand. This loss, however, was partially repaired in 1763; when the French Government, availing itself of the peace, sent a staff of archivists to search the records in the Tower of London; and the result of their labours was the publication of 150 volumes of most valuable and interesting documents. The revolution suspended these labours in England: but they were subsequently resumed by the orders of M. Guizot, and were extended to Belgium, Spain, Rome, and other countries; and meanwhile greater attention had been paid to the French home records. These were now centralized at the Hotel Soubise in Paris, and

* Many of the more important documents down to 1707 have been calendared by Mr. Bruce in his *Annals of the East India Company*.

a regular Record department of great efficiency was established in 1790. Napoleon determined to make Paris the record-repository of Europe. With this view he freely robbed the archives of Spain, Italy and Germany ; but most of the documents were restored in 1815. Finally, the Record department was consolidated and much enlarged by Guizot ; and all the documents of public interest that still remained in the provinces were examined and collected. The administration of the *Archives de l'Empire* at Paris (of which the *Archives du Département du Nord* at Lille may be considered a branch) is now in perfect order, and the staff is engaged on the most extensive and interesting investigations. The well-known *savant*, M. Francisque Michel, is at present engaged in a search of the English records on behalf of the department. It may be noticed that the regular series of French records does not extend further back than the time of St. Louis.*

The imperial records of Germany are not quite so ancient, being only coeval with the House of Hapsburg. A few documents are preserved of the reign of Rodolph of Hapsburg ; but there are extensive gaps for the reigns of those subsequent emperors who belonged to other royal houses. As early as the reign of Maximilian I, a Record Office was established at Vienna. The *Geheime Haus-Hof-und-Staats Archiv* is at present in good working order and fairly accessible. A publication on a magnificent scale of the documents preserved here is now in progress, under the title of *Monumenta Habsburgica*, by the munificence of the Imperial government ; a smaller collection of Viennese records has been published in the *Bibliothek des Literarischen Verein in Stuttgart*, edited by the eminent scholar and late keeper of the archives, Dr. Chmel.

The Castilian records, dating from the time of Peter the Cruel, were collected in the castle of Simancas by the Emperor Charles V, who obtained from the Pope a brief, enjoining all persons to deliver up to the Government all official correspondence that might be in their possession. Philip II ordered all records to be carefully arranged, and alleged as a reason for his decree that "chroniclers and historians were ill-informed

* As in England many public documents were lost or stolen during the old times of neglect, and have found their way to many libraries, e. g. the Bodleian and other libraries at Oxford and Cambridge, and the British Museum ; so in France, many important records are to be found in the Bibliothèque Imperiale, the Bibliothèque du Cardinal Granvella at Besancon, and elsewhere.

"on matters of state, and that it was therefore desirable in order "to obviate that defect, to collect all such materials as might "prove serviceable for historical purposes in the archives of "Simancas." In 1844 M. Gachard and M. Tiran (the record agents of the Belgian and French Governments respectively), and subsequently Mr. Bergenroth (on behalf of the English Government), were admitted here to search for historic memorials of their respective nationalities. All the records of the Crown of Arragon have been removed to Barcelona, probably through provincial jealousy ; the Indian archives, containing the materials for the history of the Spanish and Portuguese colonies, are at Seville ; and there is yet another collection, the archives of the Royal Academy of History (now called the *Archivo Historico Nacional*) at Madrid. At each of these offices, a staff of archivists is maintained ; and many of the most important colonial documents have been published, under the editorship of Don Martin Fernandez Navarrete.

Venice, notwithstanding the numerous changes of government through which it has passed since the fall of the old republic, probably possesses the most ancient, the best arranged, and (with the sole exception of England) the most complete collection of public records in Europe. A description, even in general terms, of the Venetian archives and the history of their management, would alone occupy a large volume. The volumes of *Pacta* or early treaties of the republic, which are however only copies made in the 14th century, commence with the proceedings of the Council of Chalcedon in 481, and a treaty with the Emperor Charles le Gros in 883 ; but the original documents commence with the 10th century. They were finally collected in 1818, and placed in the stupendous convent of the Frari in the centre of the city. A complete description of the arrangement and classification (which occupied a large staff for many years) was written in 1847 by Jacopo Chiodo, the late Director of the archives, under the title of "*Piano sistematico per la distribuzione e collocazione di tutti gli archivi.*" *

* Some interesting notices of the Venetian archives, especially of the *Pacta*, have been published, under the auspices of the French Ministry of Public Instruction, by the learned historian of Cyprus, the Chevalier de Mas Latrie. Another account has appeared in the *Archivio Storico* at Florence ; wherein also may be found full information about the other Italian archives—those of Rome, Florence, Naples, Turin, Milan, Mantua, Padua, &c. A very able account of the records of Mantua was published there in 1861 by the Cavalier Toderini.

According to this arrangement the collection is divided into four *riparti* or compartments—political, judicial, commercial, and territorial; each compartment is divided into various heads and sections corresponding with the complicated organization of the public offices of the republic. The Venetian Record Office was first established by an edict of the Grand Council in 1402, and confirmed by an edict of the Council of Ten. Secretaries to superintend the various archives were appointed from time to time, and were multiplied in number and increased in dignity as the charge became more onerous and more important. At the commencement of the 17th century a patrician superintendent was appointed to take care of the secret archives of the Senate, with a sufficient staff of under-secretaries; and in 1632 the Senate elected a second superintendent for the safe custody of legal documents of a more public nature. From 1505 the Signory had a paid historiographer, whose duty it was to write a full history derived from these archives. At the present day, permission to search the records is most freely accorded by the Italian Government; and every convenience for successfully conducting a search is provided. Mr. Rawdon Brown, who is employed by the British Government on a calendar of the Venetian documents relating to British history, states his belief that investigations into many subjects connected with the early modern history of Europe in general, may be better carried out here than in any other repository in Europe.

The English records have been generally divided by archivists into two great classes:—I. Records Proper; II. State Papers. The Records Proper consist of judicial proceedings, decrees, judgments, plea-rolls, &c., together with all manner of enrolments, registrations, fines, letters patent and close, charters, and the like; and a vast mass of miscellaneous memoranda of all statements formally put on record in any public court or office. In fact, to this great class belong all public instruments of a formal character, from Domesday Book down to the most trivial inquisition or deed enrolled.

The State Papers consist mainly of the correspondence of kings, Secretaries of State, and other public men; together with *all* the records (correspondence, minutes, &c.) of the Privy Council and all the public departments. They are divided into three vast series—the home, foreign, and colonial. The names of the first and last of these series sufficiently explain their nature. The foreign papers contain the correspondence of the Govern-

ment with its ambassadors, ministers, consuls, or agents abroad ; herein may be traced the entire course of negotiations on such important subjects as alliances, offensive or defensive, treaties of peace or commerce, acquisition or cession of colonies, royal marriages, and the like ; and whilst they afford much information to the English historian on the whole subject of national relations with other powers at different periods, their immense value to the student of general history is manifest.

A State Paper office was established, and a keeper appointed, by Queen Elizabeth in 1578. James I ordered that they should be removed from the chests in which they had hitherto been deposited and in which they had been rotting,* and that they should be placed in an apartment in his palace at Whitehall to be " the readier for our use, and for the use of any of our principal secretaries." In 1764 the contents of the office had fallen into such confusion, that on a memorial from some eminent archæologists, a Commission was appointed to consider and remedy the evil. This Commission was in existence for thirty-six years, but it does not appear that it made any very considerable progress in its task ; for the reforms then proposed were not thoroughly carried out until far on in the present century. In 1854 the office was entirely merged in the Public Record Office, the history of which we will now give.

The Chancery records were from time immemorial deposited with the Master of the Rolls ; and from the time of Edward IV have been regularly placed in the Rolls House (then called the *Domus Conversorum Judæorum*,) which still forms a portion of the modern repository.

Edward I appropriated a portion of the Tower of London as a Record Office, mainly for the reception of Exchequer documents. It is remarkable that Edward II actually issued a writ of privy seal to appoint proper persons to *digest, calendar, and generally superintend the preservation* of the documents in the Exchequer treasuries and at the Tower. Edward III, Richard II, Henry VI, Elizabeth, and Charles II, each in turn directed their attention to this subject, and endeavoured to devise improved methods of dealing with it. In 1703, Parliament took up the question ; a Committee of the House of Lords was appointed, and continued its labours

* It may fairly be doubted whether our Indian almirahs indicate a state of record administration much more advanced than that which is disclosed by the " chest " arrangements of 1600.

in a somewhat desultory fashion until 1719. Then the matter was again allowed to drop ; until it was at last revived in earnest in a Committee of the House of Commons in 1800.

The Report of the Committee of 1800 is probably the most valuable book that has ever appeared on this subject, containing as it does the fullest returns from every one concerned with the care of records, or able to afford any information about them, whether in regard to their extent, their condition, their preservation, or their arrangement and then existing management.

The "Old Record Commission" was appointed to give effect to this Report. It lasted for thirty-seven years ; and was the immediate parent of the present Public Record Office. Notwithstanding the bearing of the Report on which it was appointed, it attempted little beyond the printing of a few isolated records ; many of the works published under its auspices are extremely valuable and interesting ; but the good arrangement of the original documents, the progress in indexing and calendaring, and the numerous other facilities for their study that are now offered, are attributable to the late and present Masters of the Rolls, and to their learned Deputy-Keepers, Sir Francis Palgrave and Sir Thomas Duffus Hardy.

At length Government and Parliament grew tired of the half-measures symbolised by the Record Commission, and the continual complaints that were made of its inefficiency. The Record Act (1 and 2 Victoria c. 94) by which the present Public Record Office was established, was passed in 1838. It was* judged necessary, for the purpose of preserving the records and managing them effectually for the use of the Government and the convenience of the public, "to provide a
"general repository, consisting of a fire-proof building, sufficiently extensive, and in a central and convenient situation.
"With such a building, *all the records may be arranged in
"a regular and systematic order ; the plan of management
"may be consistent and uniform, the number of officers required may be reduced to the lowest amount, the work to be
"performed may be carried on under the most effective inspection, and public economy and convenience be equally consulted."*

* *Vide* a Report addressed to Lord John Russell by Lord Langdale, printed in the first Report of the Deputy-keeper of the Public Records, 1840.

The supreme authority over the newly constituted department was given by Lord John Russell to Lord Langdale, the Master of the Rolls, and his successors ; and a distinguished scholar and antiquarian, Sir Francis Palgrave, was appointed the actual head of the office as Deputy-Keeper. Under Lord Langdale and Sir F. Palgrave, and subsequently under their successors, Lord Romilly and Sir T. Duffus Hardy, the system of administration of the records has been developed and well-nigh perfected.

The staff of the department consists of a deputy-keeper, a secretary, and a number of superior officers (divided into three grades), who are for the most part men of some academical distinction from Oxford and Cambridge and skilled antiquarians. In a subordinate capacity, there are 'transcribers,' or clerks for copying, indexing, &c. ; and a large number of skilled workmen, as binders, cleaners, sorters, messengers, porters, &c. The total cost of the department (including the charges for the editing of calendars ; but not including the special grant for printing chronicles and other historical works, which is not properly connected with Record administration) was less than £20,000 per annum for the years 1865-6 and 1866-7. It has been calculated that far more than that amount is saved to the Government on account of printing, apart from the convenience afforded to the legal and literary public and to officials, and apart from the preservation of the records and the inestimable boon thereby conferred on the scholar and the historian.

When a man is appointed to one of the superior posts in the department, he is usually attached at first to the secretary's branch, wherein he can obtain a general knowledge of the arrangement of the contents of the office, and some familiarity with the current business ; whilst at the same time he will learn the art of reading the old Latin, Norman-French, and English documents, with all their difficulties of court-hands and contractions, of defective chronology and obsolete or technical phraseology. He will in this way, after one or two years' well-directed study under the best masters, have acquired some facility in reading, and some acquaintance with the nature of the records at large. He will then be entrusted with the arrangement, and the preparation of a *précis*, of some series of yet unarranged ancient documents ; or with some of the more difficult transcriptions. Finally he will be put in charge of one of the public

search-rooms, or entrusted with the preparation of one of the Government calendars of State Papers.

The handsome and spacious buildings which have been erected for the accommodation of the department and its treasures, are situated on the Rolls estate, extending from Chancery Lane to Fetter Lane. In all the arrangements at the Rolls, the main objects of a Record Office are carefully kept in sight. These objects are—(1) to provide for the perfect security of the records; (2) to ensure their being readily and conveniently accessible.

As soon as any sets of records have been taken into the custody of the Master of the Rolls, they are cleaned, sorted, bound or mended (as far as may be necessary and practicable), and placed in boxes for subsequent arrangement. Then a catalogue or general descriptive list is drawn up; and afterwards, the more important documents are indexed, and the *most* important are ultimately calendared. When the work of arrangement is complete, they are placed in iron presses in the room assigned to their class. Every room in the building is separately fire-proof, being cased with iron, and furnished with an iron door which is thief-proof. Water can be turned on at a moment's notice in any room for the extinction of fire. Hot-air pipes are placed around every room, so that an equal temperature is preserved throughout the year; and by this means damp is excluded and rot arrested. Every part of the building being thus protected by every means that science can devise, the whole is constantly watched night and day, both by the department (an officer and an office-keeper being resident in an adjacent house) and by the police; a police patrol is on duty throughout the night in the building.

The perfect accessibility of the records is provided for (1) by the employment of the trained staff described above, who (from their personal knowledge of the contents of the office) can immediately point out an index on being informed of the *nature* or *class* of the document required, and who can immediately produce the document itself, when furnished with its proper description (press-mark, &c.) as given in the index; (2) by providing indexes of all those records that are likely to be consulted; this is done as far as possible at the time of the assumption of the *accruing* records, while the work of forming complete indexes of all important *ancient* records is carried on as rapidly as possible during the intervals of current business; (3) by providing calendars (*i.e.* full *précis*, giving all names,

dates, &c.), with copious indexes and carefully written prefaces, of all the most important records, especially of those which may be historically important ; (4) by providing all the minor conveniences for conducting searches ; such as commodious search-rooms where the indexes may be consulted, and to which the documents demanded by the searcher are brought by the servants of the department for his inspection ; the lowest scale of fees compatible with the preservation of the records from idle or unnecessary handling ; the maintenance of a staff of transcribers, to furnish at a moderate cost copies of all documents or portions of documents that may be required for distant reference. It may be noted here that, by the Record Act, these copies, authenticated by the signature of one of the superior officers, are as valid for purposes of evidence as the originals.

Any person who desires to obtain information from the records for any literary purpose, from the composition of a history to the establishment of a pedigree, has only to present himself at the door of the office, and he will be immediately conducted to one of the search-rooms. On introducing himself to the officer in charge, and making known the object of his search, he will be instructed how to fill up one of the printed forms of demand. He will then be provided with a comfortable desk, and the required documents will be brought to him, for him to study or copy at his pleasure.

Thus, by the courteous and liberal arrangements of the Record administration, every facility is provided for the study of the original materials of English history ; whilst the documents themselves are, as nearly as possible, in a state of absolute security. We trust that the time is not far distant when a similar arrangement may be attempted for the archives of our Indian Empire.

ART. VII.—*Ancient and Mediæval India*. By Mrs. Manning.
In two volumes. London: Allen & Co. 1869.

IN 1856 was published a modest volume called *Life in Ancient India*, which at once took a conspicuous place in the literature of Indian archæology, as the only attempt which had then been made to popularize the subject in the English language. The writer, Mrs. Speir, had been in India in the palmy days of antiquarian research, when the discovery of the topes in Afghanistan and the interpretation of the edicts of Piyadasi had given a new impulse to enquiry, and when every successive number of the Asiatic Society's *Journal*, then deservedly known as "*Prinsep's Journal*," was looked forward to with a kind of excitement, as certain to announce some startling discovery likely to throw a new light upon history. James Prinsep, Mill, Csoma Körösi, Hodgson, Turnour, were in the height of their productive activity, and an intelligent and cultivated lady, living in their society, could not fail to be attracted into enthusiasm by the brilliance and the success of their labours. This enthusiasm in the course of time bore fruit in a book, one of the very best books of the second class on Indian history which has yet been written. Second class we say without a shade of depreciation, for the books that intelligently popularize the researches of others are as valuable in their way, and almost as rare, as those which are strictly original. Mrs. Speir's lively and excellent style, the *verve* and vigour of her narrative, and the care she took not to lead her readers out of their depth, attracted many readers of the class who hold ponderous quartos and shelves groaning with *Transactions* and *Proceedings* in abhorrence; and the present writer, speaking for himself, can confidently assert that his first interest in the subjects of which she treats dates from the time when he first read Mrs. Speir's book.

After the lapse of thirteen years, the amount of available knowledge of the history and literature of early India had vastly increased. Mrs. Speir, now Mrs. Manning, thought her book out of date, and set herself to the preparation of a more extensive and ambitious work, which, however, though extending to two volumes, barely covers half the ground occupied by her former treatise. She determined to omit the historical

portions, and she felt herself compelled to re-write the portions which related to literature, and the result is that her new book must be treated, not as a new edition of her former one, but as an entirely different work. With the exception of a couple of chapters on architecture and commerce, the book may be described as a study of Hindu literature; and with the further exception of the Buddhistic literature, which she has not touched, a *complete* study. We somewhat regret the choice, for we still have to turn back to her *Life in Ancient India*, for the only compact and connected account of the reign and inscriptions of Asoka, of the history of the Græco-Bactrian kingdom as gathered from coins, and of similar subjects, which exists in an English dress, while a large portion of Mrs. Manning's present work goes over ground on which accessible and readable treatises have already been published. But we may hope that this publication by no means marks the term of the accomplished author's literary activity, and that we may yet see a supplementary volume from her pen, giving a connected sketch, so far as is possible, of the historical results which have been attained by the students of early Indian life and literature. Mr. Wheeler fails in sufficient appreciation of the work of his predecessors, and to some extent wastes both his time and his intellect in trying to do again work which has been done to his hand; the historian should be content to receive his light from the hands of those who started in the race before him, for so alone will he be able to carry it nearer the goal. Mrs. Manning is eminently fitted to write history in an appreciative and teachable spirit,—to give us the results of past labours in a form which the many can enjoy, and thus to extend the boundaries of knowledge among persons of general cultivation who cannot devote time to this special study; and she might well do for Indian history what she has done in these two volumes for Indian literature, and thus satisfy a want which every one who has attempted to form correct notions on the subject must have deeply felt. Her omission of Buddhism from the present undertaking we cannot but commend; the subject is too vast for an episode, and would suffer from perfunctory treatment; but here too we may express a hope that Mrs. Manning will live long enough to complete her work; for the general knowledge of Buddhism would be greatly advanced by a treatment like that to which the Hindu religion has been subjected in the work before us.

It is perhaps hardly necessary for us to guard against the supposition that we regard Mrs. Manning's work as valuable on account of the new light which it throws upon old questions. She would be the first to repudiate any honour beyond that which is the due of a popular exponent of the conclusions of scholars. There is a wide interval between her and the writers whose opinions she puts into a readable shape—such writers as Muir, Goldstücker, Haug, and Lassen. But her work, such as it is, is as well done as it could be; her style is pure, straightforward, and lively; her knowledge of the European literature bearing on her subject is very extensive; and she has been saved from the errors incidental to a popular writer who has no claim to deep and accurate scholarship, by the kindness of the friends who have undertaken the task of revision. A book which before publication has been submitted to the searching criticism of Professor Goldstücker and Dr. Reinhold Rost, must be entirely free from minor errors; and among the minor merits we may mention that the spelling throughout is uniform and scientific, that there is a scholarly index of Sanskrit words explained and proper names, and that, as becomes a lady's book, the chapters have pictorial headings, some of which are of great merit, particularly the sketches of Indian sacred plants executed by Mr. Fitch of Kew. We may add another feminine characteristic, namely, a genial and graceful sympathy with the people of India, and a persistent endeavour to bring into full light whatever of high and noble sentiment is to be found in their religion and literature. We are not sure that this feeling does not occasionally lead to one-sidedness; for instance, the Vaidic sentiments about sin and virtue are represented as nearer to our own than in fact they were, and the grotesque and immoral developments of later Hinduism are kept as much as possible in the background; but this is a fault which, while noting, we willingly pardon, in consideration of the feelings which have led to it. We should be the last to maintain the immunity of female authors from criticism. If a lady publishes a book, she enters into the arena with men, and courts precisely similar treatment. But while criticising, we cannot but respect the sentiment that prompts her to shrink from repulsive details of morbid anatomy.

We shall not attempt elaborate criticism of a work so comprehensive, and, passing over some of the subjects treated of

with a brief notice, shall remark at greater length upon those which seem to ourselves, or which are likely to seem to our readers, the most interesting. Mrs. Manning herself clearly indicates her preference for special branches of her subjects. Her account of religion and literature is elaborated by careful and loving touches ; while her sketches of Hindu medicine and astronomy, though intelligently done, are introduced for the sake of completeness only. No reviewer, unless he had taken a professional interest in those studies, could produce a valuable criticism on those portions of her work ; and, as completeness is neither desirable nor possible in a short article, we shall not attempt it.

The book commences, as most books of the class commence, with the Rig-Veda. But the time has surely come for the writing of a pre-Vaidic history, a work which, combining as in a focus the scattered rays of information obtainable from innumerable sources, might give us a connected account of the early Aryans, and of the tribes whom they displaced in India. Much attention has been directed to these subjects of late, for, as in geology the strata nearest the surface are explored before the depths are interrogated, so it is with history ;—that of times resembling the times in which we live is first studied, and enquirers are gradually tempted further and further back. And as such exploration tends in geology to extend the domain of organic life into regions where its existence was previously not suspected, the corresponding process in history brings to light traces of life and thought and policy, in what was to a previous generation of enquirers a waste of darkness. The Rig-Veda is the beginning of much, but it is not the beginning of everything. Its elaborate hymns imply a long previous religious history, just as its elaborate language implies a long formative age, during which auxiliary expressions incorporated themselves into words as case and tense endings, and a complicated grammatical system evolved itself. In the institution, in the worship, in the traditions of the Vaidic Indians, it is easy to detect traces of previous life and organization—the scars of fierce conflicts, as well as the accumulation of long peaceful ages ; and if we extend our horizon to embrace other nations of Aryan descent, the comparison opens up to us a new and productive source of historical knowledge. As yet but two stages in pre-Indian history have been clearly discriminated. Comparative philology first shows us an Aryan people as yet indiscrete, and dwelling in

a common home, who had names for many things and for some ideas ; and by an analysis of the similarities and dissimilarities of the several vocabularies which belong to Aryan nations, we can form a tolerably close conception of the life lived by that original people, of its material possessions and environments, of its likes and dislikes, and of its views about the unseen world. Nor is there merely a community of names to help us ; the community of traditions throws a still closer light upon the mental stock of the common race, though in this enquiry it becomes necessary to employ the greatest caution in distinguishing between those traditions which crop up everywhere and seem a common heritage of the human race—turns of thought which in our opinion unmistakeably point to a common human ancestry for all hitherto-discovered races of men,—and those which specially distinguish the Aryan stock. The story of a flood, the story of a path to heaven up some marvellous tree—the bean-stalk of our nurseries—and many notions about the magical potency of words and names,* are illustrations of the former class. The myths of sunrise, of which so much has been said, and the myths of the origin of fire, belong to the latter ; and these cases may at once be recognized, as well by the ethnical limits of the tradition, as by the fact that the common tradition generally rests upon a common etymological basis. What Mr. Gladstone calls the Pelasgian† element in the religion of the Greeks, as distinguished from the Hellenic and oriental elements, is almost identical both in names and substance with the religion of the Indra worshippers of the Rig-Veda.

* The objection on the part of native women to name their husbands, which strikes us at first as so strange, has its counterpart among races which can have no ethnological connexion with the people of India, except that of a common human origin ; and Mr. Tylor has collected many such instances.

† It is quite clear that, apart from Phœnician influences, Greek civilization was based on the fusion of two quite distinct stocks ;—the Pelasgians, a peaceful and rustic people, worshipping nature-gods ; and the Hellenes, a race of later arrival, with warlike tendencies and popular assemblies, and with a mythology which stands absolutely alone in the world in the beauty and distinctness of its conceptions, and in their depth of significance. From Hellenic and not from Pelasgic sources, Greece derived her popular institutions and her art ; and it is precisely in those two points, popular institutions and art, that Greece stands out as quite distinct from, and superior to, all other nations of the Aryan name. What Greece and India have in common, is almost purely Pelas-

The second stage in the pre-Indian history of the Aryans is that during which, after the migration of the western nations, the ancestors of the Persians and Hindus dwelt together. The linguistic resemblances of Sanskrit and Zend, point out with sufficient clearness that there was such a period. The resemblances which Dr. Haug has observed between the religious ceremonies of the Parsis and those laid down in the Indian Brahmanas, do not seem to us to indicate the same fact as clearly as is supposed. They are too close to have outlived the long period which is demanded for the separation of the Zend and Sanskrit languages, and for the migration of the Sanskrit-speaking race by slow percolation, most probably in the face of hostility, through the passes of the Hindu Kush and Himalaya, and their settlement in the plains of the Punjâb. That the Persian religion was developed and spiritualized at an earlier period than that of the other Aryan races, we should presume from the fact that it was elaborated in or near the original home of the race, and that this branch of the family had not to undergo the long unsettling migrations which retarded the development of the other tribes; the clearest traditions of the original Aryan life are to be found among the Persian records; and they have preserved in the greatest integrity the fundamental idea of all Aryan religion—the worship of fire. Now if we accustom our minds to think less of migrations in mass than of what happens before our eyes in the backwoods, we may easily suppose that the Aryan race spread by a gradual diffusion, by the efforts of adventurous young men to fix a new homestead for themselves a

gian; and we believe that close analysis would discover that the Pelasgian language, which is at the foundation of Latin as well as Greek, and even nearer to Latin than to classical Greek, contains far more of the common roots of the Indo-Germanic stock than the Hellenic language. It is a question open for consideration whether the Hellenes were Aryans at all. If they were, why were they so immeasurably superior, in the points we have referred to, to other Aryans? Perhaps the genius for truth and beauty, and the love of liberty, which are the legacy of Greece to the world and which have no counterpart among Indian or Persian Aryans, do not after all belong to the stock. These things are not produced by the smell of the sea; Cadmus could not have taught what no one in his own Phœnicia had ever learnt; and if a mere detachment of Aryans isolated in a temperate climate, and cut up by mountain-valleys into tribes, could of themselves grow such plants as these, why have we no vestige of them among Dr. Leitner's Dards? If this Hellenic superiority were the work of ages, and we could mark its growth, it would not so startle us; but it comes into our sight full-blown in the Homeric poems, and its genesis is altogether hidden.

little further from the hearth of the race ; first the neighbouring valleys and then the more distant ones were gradually colonized by young and eager settlers, rejoicing in physical life, and not thinking much of priests and their thoughts and ways, carrying with them not the rites and the forms of sacrifice, but a simple, agricultural nature-religion, such as that which in Greece we call Pelasgian, and in India Indra-worship. Such tribes settled down in the valleys of Chilas and the Gilgit, and there, necessarily few in numbers, and continually forced to contend with nature for life, without ever knowing the rest and plenty that brings the craving for thought and the opportunity for physical advance, hardened into the unvarying repetition of themselves and became Aryans of stunted development. Those who pushed further into the Punjab, found a splendid country where moderate labour supplied the necessities of life, and where affluence and peace begot thoughts that reached beyond their immediate physical environments, and a yearning for the dimly remembered religion of their ancestors. They sent to the motherland for priests, just as in later times the Aryan colonists of Bengal summoned priests from the far north-west, and the priests of Agni came from their ancestral home of the race, bringing with them the ancient ritual of the Homa sacrifice, which they soon learnt to call Soma in accordance with the dialectic changes that had crept upon the new-formed race ; bringing the sacred grass, the altars and the libations and the measured songs ; and divided into their various orders—the Hotris to pray, and the Adhvaryas to divide the sacrifices, and the Purohitas or Paradhâtas to perform the daily worship in the household of priests. We have slipped into the language of fact, though we are only enunciating a theory ; but it is a theory which alone to our minds explains the facts of the minute similarities of ritual between the Parsis, and a race which must have separated from them long enough to build up a distinct language, and which can hardly have carried a complicated ceremony through all the rough work of colonization and conquest.

But the Vaidic Aryans had local as well as tribal precursors ; and though few facts regarding the condition of the Nishâdas and Drâvidas of these early periods, and still fewer regarding their cromlech-building predecessors, can be successfully extricated from the region of hypothesis ; we should still be thankful to any one who would show us exactly what has been ascertained. It would be easy to form a constructive history, and fix dates for the beginning and end of the stone and iron ages, if we had not

the evidence of our own eyes to show us that all these ages may be contemporary in the same country, among tribes in different grades of progress. Cromlechs, dolmens and stone circles, the class of monuments which those who please may call Druidical, are to this day set up in the Khasia Hills;* Bhotan presents us with *Pfahlbauten* like those of the Swiss lakes; kitchen-middens have been recently discovered in the Andaman Islands; and there may yet be secluded valleys on the Thibet side of the Snowy Range where the stone hammer has not yet given place to the wares of Sheffield. Archæological generalizations are perhaps the most unsafe of all, for they rest on the assumption that similarity of habit always implies community of race or in time; whereas it is often the case that habits mark certain stages which all tribes go through, and every nation at a certain stage in its development, whittles flints into hammers, just as a child cuts its teeth. Besides, the facts as known are as yet too isolated to found a theory upon. We have not yet seen a map of India marking all the spots where cairns and cromlechs have been discovered; and we doubt if such a map could as yet be drawn. Till it is drawn, we shall have no means of judging whether these works are in reality the productions of many scattered tribes, or whether, as conjectured, they belong to a single tribe, which swept from Southern India through Afghanistan into Europe. Such a conjecture requires for verification the concurrence of facts of more than one class; and as yet we have no approach to such concurrence, either on the side of the anatomist or the linguist. What we do know of the aborigines (provisionally so called) of India in the early periods, is learnt from the comparison of languages, and from references in Sanskrit literature; the analysis of their own traditions can teach but little, for all tribes of low development, when not assisted by an organized priesthood or association of bards (the first step towards literature) are singularly forgetful of their own history, and seldom preserve the memory of an event, even in a mythic form, for above a century. The non-Aryan tribes had no civilization of their own, for all civilization in the peninsula is of the Aryan pattern, and its language is throughout Sanskrit, grafted, as an obvious intrusion, upon the local dialects. Apparently they had

* These were noticed first by Colonel Yule and afterwards by Dr. Hooker in a book that ought to be well-known; but when Dr. Hooker drew attention to them many years later as President of the British Association at Norwich, almost all the English press, including the *Times*, drew attention to the fact as an important new discovery.

no settled political institutions. Their marriages appear to be described in the Gândharva and Râkshasa modes of Manu, i.e., promiscuous intercourse, where no man knew who was his child, and property descended, as now among the Nairs, to the sister's son ; and the violent abstraction of the women of some other tribe, which is the custom practised among the savages of Australia to this day.* Of their theology something might perhaps be learnt by a comparison of the views of the corresponding tribes at this day, and such comparison would result in bringing to light a series of deities representing the powers of nature, not in the imaginative way in which an Aryan thought of them—the lights of dawn and twilight, the beneficent sun, the fertilizing river,—but as grosser earth-powers, eager to torment and ruin, and only forced grudgingly, by cruel and sanguinary sacrifices, to help their worshippers. It requires little imagination to connect the earth goddess of the Khonds, with the ferocious Durgâ, who has held her own in Bengal in despite of centuries of Aryan worship, of the *ahinsa* of the Buddhist schools, and the refined sensitiveness of later mysticism.

But Mrs. Manning has wisely consulted her own inclinations, in leaving the scanty harvests that might be gleaned from the pre-Aryan field, for the richer and more pleasing task of portraying the worship of the early Hindus, whose cult, alien as it is from the ideas of to-day, sparkles with bright fancies and glimpses of far-seen truth. Her first four chapters are devoted to the Rig-Veda, and treats separately of the objects of worship, the modes of worship, the material environments of the Vaidic people, and the origin of the priestly caste. Much as is known of the Vedas, it is obvious that there are many questions still awaiting solution. Why, for instance, is the sun deified under so many names ? We have the divine Savitri, Agni (a name which, originally belonging to the fire of the domestic hearth, is transferred to the sun as representing that fire in the heavenly mansion), Vishnu the swift goer, who strode in three steps through the sky ; and the Aswins, obviously sun-deities, or, which is the same thing, horse-deities, for the horse represents the sun in the religious language of many Aryan nations. This multiplicity of ideas resolvable into

* And of which traces remain in many other countries. See McLennan's *Primitive Marriage*. He traces the form of capture, even when the fact is forgotten, in the marriage-laws of all countries. This form was called in India Râkshasa from the traditional abduction of Sitâ. It, as well as the Gândharva, was allowed to the Kshatriyas, though never approved, on the principle of *factum valet*. The ardent young conqueror would conform to the easy marriage-laws of the land, or make easier ones for himself.

one, is a clear indication of the fusion of races, or rather of tribes belonging to one great race. When we find two gods of precisely similar attributes, but different names, we know that they are identical in origin, but worshipped by a different people. Those who called the sun Savitri and those who called him Vishnu no doubt originally dwelt apart, and were intermingled as an effect of migration into a new home, just as Germans and Irish and English and Scotch are fused together in the plains of Ohio and Illinois. The Aswins, the twin-horsemen, who represent morning and evening twilight, or the mingling of light with darkness,* have their representatives not difficult to find in Grecian legend.

Safe comes the ship to haven,
Through billows and through gales ;
If once the great Twin Brethren,
Sit shining on the sails.

And the Aswins brought back Bhujyu, who sailed in a hundred-oared ship and went to sea and was nearly drowned, in vessels of their own along the bed of the ocean.

One distinction among the objects of Vaidic reverence has been frequently pointed out, and it is very important. While the winds and the air and the sun and the twilight were all deified, and all addressed in the language of prayer, it was to Agni, the home-dwelling God of fire—the literal fire upon the hearth, that sacrifice was first offered ; and this very naturally, if we remember that sacrifice as a fact, as actual food given to an actual being who consumed it, must always have preceded sacrifice as a mere symbol. The sacrifice to an unseen God requires an effort of imagination which cannot be expected from primitive worshippers. As they flung the fat offering upon the fire, they could *see* the flames devour it and dart up well-pleased, while in the sacrifices of later times it was only conventionally understood that the divinity derived any benefit from the oblations brought by his worshipper. The most recent investigator†

* Neither of these look to us the true guess. The Aswins are inseparable, while morning and evening twilight can never, by the nature of things, be seen together ; the Aswins are similar, but light and darkness are opposite. Can it be that they represent something never seen but *posited* as seen by a strong imagination—the pair of horses that drew the chariot of the sun ? They were perhaps as fully believed in as the sun himself.

† We refer to the younger Burnouf, whose speculations are based on an exact and extensive knowledge, but are not always sound. He is even tempted to regard Christianity as a fire-religion, explaining *Christos* as “he who is fed with oil,” i.e. fire, and fire being produced by the friction of wood may be spoken of as the son of Viovakarman, or the carpenter : which is only paralleled by Bastian’s suggestion of a connection between Joseph of Arimathea, and Ari-Maitreya the future Buddha.

in this school is ready to tell us that the Aryan worship was for a long period merely a fire-worship, and that the heavenly luminaries attracted reverence solely as partaking of the nature of fire; but at all events it must be admitted that the origin of sacrifice was the action of feeding the culinary flame, done devoutly, and in the presence of a mysterious being whom the householder regarded as actually possessed of life.

The worship of Agni and other gods of light explains the Hindu conception of sin as an offence against purity, *i.e.*, in the first instance, physical purity. There is no greater distinction between the Hebrew Rishis and their Aryan contemporaries than in the clear hold which the former seem to have had from the beginning on the distinction of moral right and wrong. We can find some indications in the Vedas, that the notion of moral, apart from ceremonial virtue, was not altogether unknown to their composers, but the latter conception had, as it has in India to this day, an immense preponderance. Their gods were of purer eyes than to behold—not iniquity, but dirt; physical defilement was the first sin, and, after ceremonies were instituted, the violation of any of the prescribed orders was the next. There is an underlying tendency in all ages and climes to elevate non-moral standards of goodness: only, when the sense of religion is deep, it takes the form of ceremonial purity and correctness, while in countries where devotion is at a discount, the *good* man is the wealthy man or the aristocrat; in Theognis the term has no other meaning; the Latin *optimus* is by derivation the man who is best off; and we ourselves ask what a man is *worth*, and hold that “the poor in a lump is bad.” The beautiful and well-known hymn to Varuna quoted by Mrs. Manning, does not convey to the mind any distinct perception of moral evil; and the denunciations of gambling extracted from the late-composed tenth book, are rather the utterances of the sufferer who curses his folly than of the prophet who denounces a vice. It would be interesting to follow up this subject; and show that in India, as elsewhere, the establishment of an organized priesthood rather hindered than helped the growth of ethical conceptions. Wherever there is a church, there grows up a tendency to measure right and wrong by standards which grow daily more conventional and heartless; and as among the Hebrews it was not priest or Levite, but the irregulars of the religious army, the shepherd or the shepherd-king, or wandering *vairagis* such as Ezekiel, who taught the deepest lessons of moral purity and

rectitude ; so in India, it is only men such as Sâkya or Nânak, great spirits who swallowed formulas, that have ever taught a really high morality. But morality has an enemy in mystical philosophy as well as in ritualism ; and it is impossible to study the Purânas without perceiving that Pantheism tended to efface ethical distinctions. Those distinctions, as we understand them, do not lie very deep in the Hindu mind, and that they exist at all is due partly to the abiding influence of a few great teachers, but mainly to the impression which cannot but be produced on the minds of a people long subjected to strong government. Since Buddhism appeared, the doctrine of *Ahinsa*, or respect for life, has been the common property of Hindu sects, but the virtues of truth-speaking and respect for property owe their recognition as virtues more to the magistrate and the priest, and this not so much because of the terror he inspires, as because of the habit which that terror has helped to form. But it is time to return to our immediate subject.

The relations between the Aryans of the Punjab and the indigenous tribes, are dimly guessed at from the Vaidik hymns. It is perhaps an error to suppose that these tribes were so wild and frightful as to deserve in sober earnest the names of Rakshasa (goblin), and Asura (which was understood to mean an enemy of the gods, a Titan), which the hymnists lavish upon them in a spirit of boyish exaggeration. More common-place, and more truthful, are such terms as Nishâdas, "the settled or seated tribes," and Dasyus, "the people of the country," and many of such persons are spoken of by their names as historical people. Mrs. Manning is doubtless right when she states that some of these were converted to the worship of Indra, and admitted thus early into the brotherhood. But we cannot agree with her, when she quotes the Yâdavas as instances of this transformation, more than when she identifies them with the Jâts. If ever there was a tribe of well-known Kshatriya descent, it was the Yâdavas, who belonged to that mighty moon-race from which the Kauravas and Pândavas were descended. The genealogy, though intermixed with legendary matter, is as well-established as any of these early genealogies can be, for it belongs to an old tradition of the Mahâbhârata, and is supported by the hymns. Yâyati, a rajah, descendant of Pururavas, had obtained fame and spiritual merit by his numerous and costly sacrifices, but had incurred the anger of Sukra or Usanas (the planet Venus), and was cursed with premature old age. This curse he had the power to transfer to any one of his five sons,

(Turvasu, Druhju, Yadu, Anu, and Puru) who would voluntarily accept it. One by one declined; only Puru undertook the duty, and received the blessing, which was such as a Hebrew law-giver might have apportioned him—a long reign in his own land. One of his descendants was Bharata, who has given a name to the greatest of Indian epics, and to India itself, for a hundred million people speak of the country they live in as the land of the descendants of Bharata. A prince of this stock was reigning in the Punjab when Alexander's audacious apparition startled the land, and was the first to array the discipline of India against what must have seemed to him the undisciplined boldness of the west. The other brothers were doomed to be exiles and wanderers. Thus the legend rather tells of degradation from the Aryan family than of assumption into it. From *Druhju* are derived the Bhojas, who appear in the epic traditions as a pure Kshatriya race, for there is nothing to support Mrs. Manning's assertion that the Bhojas are the present Bhotiyas. There was a tendency among later genealogists to complete the cycle of human descent by treating foreign nations as runaway descendants of the patriarchal heroes of their own stock, who had forgotten the pure Aryan customs and given themselves up to unlawful habits. Those among such nations who distinguished themselves on the battle-field would be appropriately credited with a Kshatriya origin. We find instances of this tendency among the descendants of Turvasu and Anu; the former is said to have been the father of the Yavana or Ionians, which Lassen explains by what seems to us the unnecessary assumption that the Yavana signified generally any race to the far west, and here in particular the Turushka or Turks, whose name shows some resemblance to that of Turvasu. But even if we could be induced to admit that the Hindus used Yavana, the name of a well-known nation in the far west, for Turushka, the name of a quite different nation on the north-western frontier, why should either Greek or Turk be supposed to have had a Kshatriya ancestor? Obviously because there were no Hindu tribes who claimed descent from Turvasu, and as, for the sake of completeness, it was necessary to give him a progeny, the genealogists of the *Mahâbhârata* by a bold stroke of invention attached to his name the conquering Yavana, a dim story of whose exploits had already reached Eastern Asia, if indeed the success of Alexander had not yet brought the name and fame of the Greeks close home to India. Of the descendants of Anu a

partially similar account must be given. A branch of his race appears among the most famous and the most devout of the Kshatriya families in the Punjab. Bharata, the brother of Râma, was descended by the mother's side from this family. The hymns of one descendant have come down to us in the Rig-Veda ; another was famed far and wide for the splendour of his offerings. But the Mlechhas in general are also said to be sons of Anu ; which can only mean, if it has any meaning apart from the desire to round off the tale of the nations of the earth, that some of Anu's progeny, living far away from the centres of Hinduism, lost or never learnt what the Mânava law-book calls the good custom of the Middle Land—that is, the caste system, and the duties and privileges of Brâhmans, and were thus confounded in the strict Hindu mind with outcastes, although their legendary genealogy was not forgotten. But we have already observed that there is an essential difference between the conception, to which the texts point, of pure Hindu races lapsing into barbarism, and the conception advocated by Mrs. Manning of barbarian tribes admitted within the Aryan pale.

As to the descendants of Yadu, there is no indication whatever that they were non-Aryans. Their history and their migrations are perfectly traceable, and have a thoroughly historical tone. It is startling to find Krishna, whom millions of Hindus to this day identify with the Supreme God, and in whose worship the Hindu self-abnegation before the idea of God takes its highest tone, set down as an outcaste and a Mlechha because of the slight similarity of name between his family and the Jâts. A people's instinct is seldom so mistaken as to allow them to manufacture first a hero and then a God, out of a warrior of a foreign and despised race. Again, we last hear of the Yâdavâs in Guzerat, where after repeated migrations and many struggles they had finally settled down, and in Guzerat there are no Jâts. There are Jâts in the Punjab, in Sind, in Beluchistan, in Rajputana, everywhere except where there is reason to believe that the Yâdavâs settled, and the identification fails altogether where it ought to find its surest test.

Not that we deem it necessary to agree with Mrs. Manning that the Jâts were non-Aryan. We see no reason to doubt the ordinarily-received belief that the Jâts are the Yuei-chi. Chinese historians trace the Yuei-chi to the frontiers of India, and numismatic evidence leaves us no doubt of their predominance in the Indus region for two centuries at least. In the geography

of Ptolemy, we find Indo-Scythia occupying precisely the same region as that on which the modern Jâts abound. All this is clear enough, but the question has been needlessly complicated by the assumption that the invaders were necessarily Mongolian, because their name is spelt in Chinese fashion, and that they were in some way related to the present inhabitants of Thibet. Whatever the Jâts are, they are no Mongolians; they speak a Prakrit dialect, they are of tall stature and fine Aryan physiognomy; and the democratic character of their institutions is not paralleled by anything to be found in Indo-Chinese regions. They have at least as much claim to Aryan descent as the Hindus, and there is no reason to suppose that the Aryan migration from Bactria was less active on the side of the west and north-west than in other directions. There are still relics of Aryan occupancy north of the Hindu Kush, and it is easy to imagine how the main tribe, finding no congenial home among the Turks and Mongols of Central Asia, pushed across the Himalayas into Kashmir and thence down the Indus, to settle among kindred races. It was but the last term in the series of Aryan migrations along the same route. The new comers fraternized with the people of the land; their language, from the first similar, became all but identical; they adopted the Hindu religion without difficulty, though never very earnestly; its yoke always sat lightly on them; and a large portion of the nation early became Muhammadan, which we nowhere see among the old Hindu race; while the last few centuries have witnessed the growth among the Jâts of the new religion of Nanak and Guru Govind.*

Mrs. Manning's heart is evidently in the religious portion of her subject, and she traces the development of Brâhman thought in a series of chapters that are at once clear, forcible, and accurate. The fifth chapter is devoted to the Aitareya Brâhmana, and its materials are naturally drawn mainly from Dr. Haug's study of that work. It is well-known that when Dr. Haug was a professor at Puna, he, with much difficulty and at considerable

* See Mr. George Campbell—an accurate observer—for the purely Aryan character of the Jâts. *Ethnology of India*, pp. 16-17. We have only to add with reference to the passage quoted by Mrs. Manning, where Indra is entreated to bring Turvasu and Yadu into conformity with his law, that this does not by any means throw doubt on their Aryan origin; the descendants of Yâyati were devout worshippers of Agni; and the words point to a rivalry between the votaries of Agni and Indra.

expense, engaged an Agnihotra Brâhman to go through the Soma sacrifice on his own premises, and in this way mastered all its details. The sacrifice is of course much older than the Brâhmana, for while the religious conceptions of the book, like those of all the Brâhmanas, betray a specially Indian and post-Vaidik development, which we must presume, was the result of centuries of thought, the details of the Agnishtoma sacrifice are, as we have already seen, strikingly similar to those laid down in the Zend books, and in use to this day among the Parsis. The time that must have elapsed between the composition of the Rig-Veda and that of the Brâhmanas is indicated by the fact that, when the latter books were composed, the Rig-Veda was believed to have been no work of mortal man, but to have been evolved in the dawn of things by the Demiurgus, who created both gods and men. Yet even at the date of the Rig-Veda, if we may ascribe a date to what was the accumulation of ages, Persian and Hindu were widely separated, and there are indications that this separation was not the mere result of non-intercourse, but that a sectarian opposition existed, which showed itself in singular forms. Just as in Greece the substitution of the old Pelasgian nature-deities for the gods of the Hellenic stock was looked upon as a change of dynasty in heaven, and as, when Christianity prevailed, all the heathen gods were degraded to the rank of devils; so we find the *devas* of India—Indra and the atmospheric gods—holding in Persia the rank of evil-spirits, and even in that capacity sinking from the gigantic Titans who contended on equal terms with the gods, to the *divs* of the story-books, which correspond with the Arabic *jins*—imps of inferior and slavish intellect, like Milton's 'lubber-fiend.' So on the contrary Asura, the Persian Ahura,* which is said to mean "the giver of existence," is a name given in India to the enemies of the Gods, in Persia to the great benevolent deity. We cannot but connect this contrast in nomenclature with a religious opposition. But the worship of Agni, of which the Soma sacrifice formed a part, was, as we have seen, the fundamental worship of the primitive Aryans, and was no doubt adopted in its fullest development directly

* *Asura* from the roots *as* 'to be' and *rá* 'to give'; 'giver of being'; the ordinary derivation gives *sura*, a god, (from the same root as *svarga*), with the privative *a*. The Asuras would thus be the antigods, which agree with their functions in Indian legend. But the gods of one system are always the antigods in another; and the Persian use of the word, as in Ahura-mazda, is in favour of the first derivation.

from the Persian ritual. We know not whether the milky-juiced *Asclepias*, which retains in India the name of Soma, was the original plant from which the Bactrian Aryans brewed their sacred drink, or whether it was some corresponding plant of similar properties. In both rituals it is offered with holy bread, and sprinkled with water. The Parsi Zota corresponds to the *hotar* priest of the Brâhmanas. The very *sphya*, which Haug has demonstrated to be a wooden sword, waved over the Hindu sacrifice to keep away evil spirits, has its counterpart in the sword of the Angel Sraosha in the Zend-Avesta. The use of Soma juice thus leads us back to the most hoary antiquity, to the time when the simple minds of primeval shepherds, who saw in the glittering blaze a mysterious something endowed with wondrous life and power, recognised divinity also, like Caliban, in the exhilarating effects of intoxication, in the nectar which inspires joy, and pours forth "songs and hymns and thoughts."

There is an interesting episode in the Aitareya Brâhmana to which perhaps undue importance has been attached. This is the story of Sunahsepa, which has been conceived to establish the existence of human sacrifices among the early Aryans. Just so has the story of Isaac's sacrifice been held to prove their existence among the Jews. But the inference is much more probable in the latter case than in the former; for firstly we know that the Jews lived among kindred nations, such as the Phœnicians, with whom human sacrifice was not only a familiar idea, but a most frequent practice. It is probable enough that the early Jews did as their neighbours did, till some large-hearted reformer, under the deep inspiration of a human love which overbore formulas, effected a change in the custom of his tribe. But among the Hindus such influences were unknown; we find no trace of the custom except among the semi-savage tribes of the Eastern Ghâts, and the wild Durgâ-worshippers of Bengal, with whom the Aryans had as yet no points of contact. Again, in the Semitic story of Isaac, and the Greek story of Iphigeneia, which shows a trace of Semitic influences, we have a common feature which shows that these sacrifices were regarded, on occasions of emergency, as a fitting tribute to the Powers that ruled the world—namely, the willingness of the victims; father and child alike accept it as a part of the order of things. But in the Indian story Sunahsepa, in marked contrast to the ordinary Indian moral feeling, which enjoins passive obedience to a parent, revolts and struggles, and goes to all the gods with his entreaties, and when at last the

fatal stroke is averted, refuses to be reconciled with, or to acknowledge, a father who had once taken the knife to slay his son. The feeling of the narrators shows the same contrast as that of the victims. The writer in Genesis tells the story simply, without dwelling on the pathos of it, and as if impressed only with the obedience of Abraham. The stories of Jephtha's daughter and of Iphigeneia bring out 'the pity of it' more strongly, but without a word of repining, while the Indian narrator evidently abhors the horrible character of the act, speaking of it with bated breath as an exceptional horror, which even in a Brâhman gave proof of a Sûdra nature; nor is there a hint that such a sacrifice could be less repugnant to God than to man. If the story proves anything, and it is probably in its main features historical, it proves a higher tone as regards human life and the sanctity of domestic relations among the Hindus than among contemporary peoples, even those who, like the Hebrews, had within them the germs of a moral progress which was to lead them higher than the Hindus were ever to rise.

The Aitareya is confined to sacrifice, and seems to have been a manual of the *Hotri* priests; but the Satapatha Brâhmana belongs to a later stage in the evolution of Hindu thought, and, like the Upanishads, leads us into strange speculations on the commencement of the world's existence and the origin of man. It is quite true that glimpses of such speculations are to be found in the Rig-Veda, attaining some prominence in the tenth book; but that is one of many indications of the later origin of that book. It is an error to suppose that infant nations are everywhere and always contented with the simplest solution of the question of creation—that God made the world. The Hebrews were so, and they put the matter in the plainest and most anthropomorphic way. Their solution has generally sufficed for Christian nations. But the Greeks of Homer entertained no such notion. God was to them the world's ruler, not its creator; and, as far as we know, it never occurred to them to question whether the world, as we see it, had a beginning at all; when the question did present itself to Thales and his contemporaries, it was solved in a purely physical way. But in India from the beginning of speculation it was treated as a theological question. Indra and Agni and the other powers, as soon as they were conceived of as separate from the phenomena themselves, were regarded as the hidden causes of those phenomena. Indra sent rain, and the sun-god warmth; that was plain enough.

But was there any one universal cause from which the gods themselves derived their being? This was the question that occurred as soon as people had leisure to think, and the answer was always in the affirmative. Then of course the question, how were all things produced? could not but arise; and was met by innumerable solutions, which, however, may all be classed under two heads, the subjective solution in which the evolution of thought was regarded as a type and representation of the evolution of things, and the objective solution, in which certain pre-historic facts of creation were regarded as having actually taken place. It is impossible to say which conception was the earliest; we trace them side by side in the Satapatha Brâhmana and even earlier. The subjective method has been the stumbling-block of philosophers in all ages. They assume that the power which we have to form conceptions represents the process of creation. Things, they say, are the thoughts of God; psychological processes correspond to ontological. The Sâṅkhya philosophy professes to be a picture of the actual order of creation. It is in fact a picture of the development of thought. Thought (*buddhi*) working as a blind impulse in the *non-ego* (*prakṛiti*) produces consciousness or the *ego* (*ahankâra*); and then arise the separate sensations, which produce separate conceptions of the senses and organs; and lastly comes the conception of *manas*, or the general power of sensibility. The arrangement itself shows that this is an account of the formation of our conceptions, not of the formation of external things; for *manas*, the synthesis of our perceptive powers, would otherwise precede, not follow them. External nature is represented in this system by the sensations which it produces only; the sensations produce in us the idea of senses, and of the adaptability of the organs of our body to receive their impressions, and finally of an inner principle which connects the sensations, and gives them a foundation. That this scientific psychology was treated in later times, as for instance in the Purâṇas, as an objective account of creation, betrays a confusion between the subject and the object incident to all Indian philosophy, but growing with the degeneration of thinking power.

The views of the Brâhmanas are quite unscientific, and display all the *naïveté* of early thought. The great problem was to interpolate a creative agency between the Supreme Being, who was regarded as too pure and spiritual for the work of creation, and the world. This is Prajâpati, the Lord

of Creation, or Daksha, at first a mere personification of force or energy (like the Logos or creative power of God), or Manu or Purusha, the archetypal man; for all these personifications occur in the legends, and sometimes in combination with one another, but the idea is always the same. The Energy, or Demiurge, emanates from or is detached from the Supreme, for the special object of creation, which is generally represented under the form of generation,—an idea which the Valentinian and gnostic heresies early introduced into the west, and which not only remarkable coincidences of expression, but actual tradition, connected with India. In its general form, it appears distinctly enough in the Alexandrian Judaism, which never ascribes creation to God, but to the Wisdom of God, or the Word of God,—forms of expression used perhaps at first to avoid the appearance of presumption, but gradually creating the impression of a distinct interpolated personality. Prajâpati in the Brâhmanas is the creator of Gods as well as of men—that is to say, of Indra and the phenomenal gods, who were always regarded as creatures, transcending human attributes in degree, but not in kind. They are more powerful than men, and they live longer, but they are neither omnipotent nor eternal. In the Buddhist cosmogony, each separate universe or cluster of worlds, has a separate heaven of gods, presided over by a separate Indra; and, when the Buddha is born, the Indras of all the worlds crowd to do him homage. The Devas are a part of the world's furniture, and in every system are subordinate, not only to the Supreme, but to his immediate emanations.

Prajâpati himself, according to a very extraordinary conception of early times, was created by prayer and sacrifice. As Agni was fed by the ministration of oil and fuel, and visibly increased in bulk, so the Rishis who taught the existence of the gods, and who were more powerful than the gods themselves, inasmuch as they could wrestle with them in prayer, and force blessings from them, were said by a bold metaphor to have made the gods; and thus we have myths of the formation of Prajâpati from seven men, namely the seven original sages. This is another instance of the confusion between the subject and the object, between the *idea* of God, which these sages no doubt did much to produce and develope, and the actual person. In the same early age arose the conception of the mundane egg, familiar to us through the famous chorus in the *Birds* of Aristophanes. And all these modes of representation are shown to us side by side in a confusion that

perhaps betokens their purely speculative character. They were the work of little knots of thinkers, put forth as guesses like the speculations of the early Greek philosophers, and not the articles of a creed, or a part of the popular belief.

We cannot follow Mrs. Manning in the brief space accorded to us through all the interesting subjects which occupy the remainder of the first volume. Her sketch of Hindu law is clear and more discriminating than we should have expected that a lady, whose knowledge must be altogether derived from books, could write. Her disadvantages first become palpable in the chapters on medicine and mathematics, in which she has avoided error by mainly confining herself to the *ipsissima verba* of her authorities. For Mrs. Manning's weakness is the very pardonable one of wishing her book to be as complete as possible—a register of what the Hindus have done in every department of knowledge; and in so great an undertaking we cannot expect that she should be at the same time original and correct. To her credit, she has preferred correctness.

The subjects treated of in the second volume, have for the most part been dealt with in well-known and popular books. The Hindu poetry obtained earlier recognition in the west than its philosophy, which is clothed in an obscure garb, and demands for its comprehension proficiency in Sanskrit. The religious history has been but of late years put upon a sound basis. It found the western world involved in baseless prepossessions; and a glance at Colonel Wilford's essays in the earlier volumes of the *Researches*, or at Maurice's elaborate work, shows how much we had to unlearn before we began to learn. But Hindu poetry, acknowledging the same rules of art, and dwelling on the same emotions, as the poetry of Europe, was earlier appreciated, and less frequently misunderstood. Much pains has been taken with it, and Mrs. Manning has little to add to what is to be found in Wilson's *Hindu Theatre*, and similar works.* Mr. Wheeler, too, has anticipated her account of the great epics in a book intended, like hers, for general reading, and composed on a scale which allows him to do fuller justice both to the historical and the poetical elements in these works. We would not, however, have it understood that these considerations detract from the merit of Mrs. Manning's abstracts, and

* Our first acquaintance with the Gîta-Govinda was made in the laborious biblical commentary of Dr. Adam Clarke, where a full translation does duty in illustration of Solomon's song, and the loves of Krishna and Râdhâ agreeably diversify the monotony of "Sunday reading."

her bright and graceful style, and power of easy narration, show themselves to more advantage in subjects of this kind than in the abstruse and technical matter which occupies a considerable part of her first volume. If we have a quarrel with her, it is on account of the abundance of poetical quotations which she substitutes for her own excellent prose. Translations into verse are proverbially unsatisfactory; and even writers whose mode of thought has great affinity with our own, cannot be put into a dress of English verse without losing all their characteristic aroma. Conington's *Æneid* and Phillip Worsley's *Odyssey*, the most successful efforts of our own time, are successful, as Pope's *Iliad* was (only with more scholarship and sympathy than Pope could claim), because they are fine poems in English; *parallel*, so to speak, with the author whose story they reproduce. But the subtle impression which the originals make, and which gives them their character as poets, has vanished, replaced by a totally distinct impression. They are readable enough, they are almost poetry, but they are not Homer or Virgil. Something of the same sort may be said of Mr. Griffith of the Benares College, whose renderings are spirited, and are said to be accurate; but most of the translations of Indian verse are dull and lifeless enough; and the spirit of the original is always better rendered in prose. A version of the abduction of Sîtâ from the Telugu by Mr. C. P. Brown, given in a note by Mr. Wheeler, is an excellent instance of translation; and Mr. Wheeler's own abstracts furnish in plain and correct English all that is really wanted.

Mr. Wheeler's volumes have been dealt with too recently in this *Review*, to make it necessary for us to treat at any length of the great epics, but a few points are suggested for notice as we glance over Mrs. Manning's pages. It has been supposed that the Râmâyana consists of two original legends, artistically blended into one, and that the banished Râma of the first portion, and the conquering Râma of the second, are in reality two distinct heroes. We accept this distinction with a certain modification, for we think it probable that the invasion of Ceylon which the author of the Râmâyana has added to the legend of Râma, was not an authentic tradition, but an invention of the poet's. Singhalese story is silent on the name of Râma, and the Aryan invasions which it does record are of a quite different character, presenting no such improbability as the direct march from Oudh to Ceylon through the forests of Gondwâna and the unsettled tribes of the southern table-land. The actual

invasion of Ceylon must have been made by sea, and so the story of the conqueror (Vijaya) affirms. Whether it was made from the east or the west side of India cannot be gathered from the story with certainty. The east is, to our mind, obviously indicated. The conqueror was the son of the Lion-armed (Sinhabahu), founder and ruler of the Lion-town (Sinhapura), in the country of Lâla; his father, the story says, was a lion, his mother connected with the royal families of Banga and Kalinga. On the voyage to Ceylon he touched first at Surparâka. These are all the geographical notes of which anything can be made, and Surparâka leaves the matter doubtful, since there was a port of that name on each of the coasts of India; the western one is the Souppara of Ptolemy, while the eastern port is far the best known from its frequent appearance as an emporium of merchandize in the Buddhist stories. Banga and Kalinga point of course to the east, and this view is at least rendered probable by the fact that when authentic history first shows Ceylon in communication with India, the port of embarkation for the island is Tamralipta at the mouth of the Ganges, the existing Tamluk. Lassen decides for the other side on the strength of his identification of Lâla with Guzerat. But Guzerat appears in his own references in the forms of Lâtika, Lâta, and the Greek Larike, never in that of Lâla; and his rejection of the mention of Banga and Kalinga as a later addition to the legend seems arbitrary. On the whole, therefore, if any grain of truth is to be gleaned from the wild story of the lion-brood who gave Singhala its name, it must be held to point to an invasion from Bengal, which is at all events more probable than a dash of warriors through the heart of the Deccan.

Holding as we do that Râma's invasion of Ceylon was an epical invention, suggested, it may be, by some vague rumour of Aryan conquest in that distant isle, and recommended to the poet by similar æsthetic necessities to those which in northern romance cut out for heroes of unknown name a splendid career of conquest in Micklegarth (Constantinople) or yet further east, we are not bound to furnish rationalistic explanations of the monkeys, ogres, and other strange beings which throng the story. But we may call attention to an ingenious attempt which has recently been made in the *Fortnightly Review* to weave into one far-reaching theory all those stray threads of mythology which present to us animals speaking and acting as men, or allying themselves with men. Mr.

McLennan supposes that all nations have gone through a Fetish or Totem stage, in which each family worshipped some special animal or tree, calling themselves by its name, and in many cases believing themselves to be literally descended from it. As there are horse and wolf tribes among the American Indians of to-day, so there were serpent and lion tribes in former days all over the old world. The Nâgas of the Amravati tope were men of the serpent tribe; sages of the same family, or a family with the same fetish, introduced into Greece the arts of writing and of medicine; Vijaya and his followers were Singhas, or men who had the lion for their totem, Leda was wooed by a youth of the Hansa tribe; and the earlier *avatars* of Vishnu were accommodations of his history to suit the Tortoise tribe and the Boar tribe, just as the later ones were intended to captivate the Buddhists and the worshippers of Krishna. Hanumat, the monkey-king of the Râmâyana, and Jambuvat the bear-king, who, by the way, was father-in-law of Krishna, of course appear in prominent support of this theory, which, though startling from its novelty, and, as usual, stretched to explain more than it really does explain,* has no doubt a certain basis of truth. It is easier to believe in a tribe whose totem was the monkey, and who perhaps adorned themselves with monkeys' tails,† than it is to suppose that the Hindus were ever silly enough to confound races of men with animals, or to believe that one of their honoured heroes had married into a family of bears, and another had gained his triumphs by the help of monkeys.

The Rakshasas, Mr. Wheeler maintains, were Buddhists. We have pointed out elsewhere, as another critic has pointed out in this *Review*, the grounds that make this theory untenable, not the least of which is that the Singhalese Buddhists themselves, in narratives which have at least an historical aspect, describes the aborigines of Ceylon as *Yakshas* (Pali *Yakkos*), a name which, though not etymologically identicated with Rakshasa, belongs to a similar order of conceptions, and was applied in contempt to races thought inferior, just as the official documents of China persist in describing Europeans as "foreign devils."

* We shall have an early opportunity of noticing this theory more at length, in relation to serpent-worship.

† To this day the warriors of Kyunjhar in the Cuttack Garhjâts, adorn themselves with the skins of beasts, with the tail hanging very conspicuously behind.

The Mahâbhârata, clumsy in form and running out into endless digressions, is more valuable to the scholar than the Râmâyana, by reason of its very artistic defects. Its successive recensions have had the effect, as they probably had the object, of making the poem an encyclopædia of all that it concerned the instructed Hindu to know. It is the first, and the most valuable, of the Purânas. It embraces geography, history, genealogy, theology ; and contains the earliest forms of many of the most popular myths. For instance, there is the Churning of the Ocean, which Mrs. Manning illustrates by extracts from a translation by Mr. Griffith. His lively metre is about as like the steady cadence of Sanskrit verse, as Macaulay's *Lays* are like the bald and solemn monotony of the old Roman Saturnian. In the Vishnu Purâna this Churning is little more than a trick to put down the Daityas and Dânavas. The serpent Vâsuki served as a rope to pull the churning-stick, and by a contrivance of Vishnu, the demons took the head and the gods the tail. The demons were blinded and scorched by the flaming breath of the great Cobra, and the gods had the advantage in the struggle for the Cup of Immortality, which their enemies had to surrender. The motive in the earlier story is rather the recovery of the lost Drink ; but the tale bears ample evidence of its meaning. It is a myth of the origin of civilization. The horse, the cow, the wine-cup, the goddess of good-fortune herself, all that makes this life endurable and happy, as well as the hope of everlasting bliss, rise one by one from the whirling waters produced by the churning-stick Mandara. Now the churning-stick used every day in India, was originally the fire-stick, which generates fire by drilling ; the sacred fire in the temples, which represents the household fire of early days, is still kindled by that primitive method which recalls the origin of fire, the first contrivance for producing flame at will, the first great advance towards civilization. Till man can cook and forge, he is more helpless than the beasts ; hence Prometheus the inventor of the fire-stick, ranked as the thoughtful man, who typified human advance generally ; and hence this archetypal churning was the origin of blessings to mankind.

The Mahâbhârata has yet to be dealt with in a scholarly fashion ; its successive additions, with their successive layers of thought, have to be distinguished, and the groundwork of the story brought into light. It is difficult to say how early that groundwork should be placed, and whether the conception of five brothers

who married one sister belongs to a highly primitive or to a degenerate state of society. It seems to imply a decline among the Kshatriya conquerors of Hindustan from the ancestral purity of Aryan custom; for not even in Manu, who recognizes many loose customs as permissible, if not to be recommended, do we find any hint of such an alliance. It is unprecedented in Aryan history, though common to this day among sparse tribes, whose rough life is unfavourable to the survival of girls, even if the difficulty of bringing up a family does not directly suggest the murder of female infants. What seems to us the simplest expression of the marriage law—the life-long bond of one woman to one man,—has no doubt grown out of an original state of promiscuous intercourse by a series of successive steps, but among Aryan nations the earlier steps of that great process have been obscured by leaps of time, and have not even a traditional existence. Homer's view of the marriage-tie is as modern as Tennyson's, and the *Mahâbhârata* suggests an exceptional case, a picture of wild explorers free from the moral restraints which control men living among their kindred, and adopting the looser code of the tribes they had conquered. This barbarism of the framework contrasts with the details of the story, which belong to a time of settled government and laws. No doubt it is full of marvels, of excursions into a sort of fairyland, where the laws of this world are suspended, of weapons with wonderful powers, giants and cannibals, subterranean palaces of the snake-folk resplendent with jewels; but the outline of the story is probable enough; the marriage-incident is too out of keeping for a mere invention; and the descriptive details are obviously taken from the story-teller's own surroundings, and thus have a distinct historical value; while some of the episodes rank among the most important and suggestive portions of early Hindu literature.

Mrs. Manning proceeds to analyse the later narrative poems of India, especially two by Kalidâsa; but here we are on new, and far less productive ground. The *Mahâbhârata*, though with a greater scope, is in essence Homeric, dealing with great incidents in a great style. Its tone is of earnest belief; its simplicity and definiteness of detail produce a wonderful impression of truthfulness; it is invaluable as a witness. But the later poems are the artificial productions of men of taste, whose business was to select from the mass of old tradition whatever was susceptible of poetical treatment, who talked of Siva and Uma as the writers of the eighteenth century talked of the Muses and

Apollo, and looked on the most venerable legends as good or bad subjects. Yet Kalidâsa lived centuries before Dante or Chaucer, and the Indian mind had modernized itself before the nations of the west had reached the flower of their glorious childhood! Mrs. Manning in her zeal for completeness, goes even beyond Kalidâsa, and gives us an account of the *Bhattikavya*, which relates the adventures of Râma in twenty-two cantos, composed mainly for the practical illustration of the grammatical treatises of Pânini and Vopadeva; as if Tennyson were to give us a work which might be read either as an "Idyll of the King" or a commentary on Lindley Murray! Another poem, described as "series of puns on a pathetic subject," should surely be condemned to everlasting oblivion with Mr. Byron's farces.

To the Drama Mrs. Manning devotes more than a hundred pages, which we cannot grudge to so admirable an exponent of contemporary life and feeling. The plays of Kalidâsa and his colleagues are, with the relations of the Chinese pilgrims, almost our only helps to the knowledge of an era that is absolutely devoid of historical narrative. The descriptive and contemplative tone of the plays, which over-rules and subordinates the action of the piece and the passions of the characters, may detract from their merit as dramas, but adds to their historical value; just as the pageantry of *Henry the Eighth* gives us a livelier picture of a magnificent but waning chivalry than a nobler play could do. The authors are never in too great a hurry to describe the environments of their characters; and perhaps description did much of the work which in the plays of our age is left to the scene-painter and the supers. We see, as in a magic mirror, the domestic life of the poor householder, the glories of the royal palace, the mansion of the flourishing *hetaira* with its many courts, the voyages of merchants, the tricks of thieves and gamblers, the woodland retreats of hermits, the Buddhist or Saivic mendicant with his begging-bowl or his skull, the courts of justice, war and hunting, and the temple service, and the tumult of the streets at night,

"When wander forth the sons
Of Belial, flown with insolence and wine."

And this picture of life is the essence of history. The sum of what we learn is that for a thousand years which are almost blank in names and dates and deeds, India possessed many flourishing cities and kingdoms, and enjoyed peace and wealth and progress and domestic happiness; and if we are inclined

to chafe at the want of self-help and self-reliance among the Hindus of to-day, and condemn them as inert and exhausted, we may well remember that they have enjoyed a long day of civilization, and had their full share of the prosperity which attends energetic action.

We have described the existing dramas in general terms ; but must spare a page or two for some account of the *Prabodha-Chandrodaya*, a play of quite a different class, and unique in its kind, no description of which had been communicated to English readers before the appearance of the present work, except, if we remember rightly, a short sketch by the late Professor Mill, in one of the earlier volumes of the *Asiatic Society's Journal*. A German translation, with a critical notice, was published by Professor Rosenkranz of Königsberg in 1842. The play is ascribed to a disciple of Râmânuya, the great Vaishnavist of the south, who is supposed to have lived in the twelfth century, and is an allegorical exposition of the Vedanta philosophy—apparently intended for actual representation on the stage. It no doubt resembles to some extent the miracle-plays of our own middle ages ; but was adapted to a graver and more discriminating audience than the boors who crowded to see the tremendous mysteries of the Incarnation and the Day of Judgment travestied by drunken parish-clerks, and welcomed with shouts of laughter the final fall of the Devil head over heels into the Bottomless Pit. The nearest English parallel would be a stage representation of Bunyan's *Holy War*. The manager in a prelude states that "Gopâla having conquered opposing kings, and re-established on his throne our mighty Râja Kirtivarman, has now become tranquil, and desires the performance of the 'Rising of the Moon of Awakened Intellect.' "The tranquillity of Gopâla excites the astonishment of an actress, who is informed that in accordance with the constitution and course of nature, periods of cataclysm alternate with periods of absolute repose ; and that the Supreme has conquered Activity, just as Reason conquers Delusion. Here Kâma or Love shouts from behind the scenes that Delusion is not conquered, so long as love is still the lord of all ; whereupon the manager incontinently vanishes, and Cupid enters with his beloved, loudly protesting that Reason is a dull being, bred of books, who shrinks abashed from the power of those eyes "that sparkle still the right Promethean fire." But even his audacity vanishes, as he trembles at the approach of the terrible she-demon, Saraswatî (speech or eloquence), the daughter

of Mind, who, like the *Worser Reason* of *Aristophanes*, can set son against father, and brother against brother, who makes the worse appear the better, according to Reason's wilful and godless nature. Here he is angrily interrupted by Reason herself, who complains of the epithet 'godless';—"Thou villain, right and wrong are fixed by the overruling Lord." Reason and Understanding converse in the next scene on the lamentable bondage of all things to *Mâyâ* or Delusion, who has thrown her fetters even over the highest *Brahma*; while she reigns, Awakened Intellect cannot show herself, and the One will always appear as many.

The second Act is occupied with the tactics of the evil party, whose king is called Delusion. Hypocrisy makes his appearance as a *Brâhman*, boasting of his success at Benares, where those who by day tend the sacred fire are at night the greatest of sinners. His grandfather, Egotism, now introduces himself, saying that the world is full of fools, who prattle and bungle, and fancy themselves learned, because they have the shaven crowns of mendicants; and that the *Vaidânta* is as bad as the Buddhist, and the *Naiyâyika* on the road to hell. King Delusion comes forward with noise and pomp, on his way to the sacred city, where he intends to hold his court in order to counteract the operations of Reason's emissaries, science and knowledge; he too takes up his parable about fools, and describes as such all who believe in such a thing as a soul and the life after death; Positivism is your only philosophy, and Death the end of all. The king is now warned of a dangerous enemy, the Lady Devotion, a strict devotee of *Vishnu*; and learns that Quietism and Religion have become the ambassadors of Reason, that Revelation (*Upanishad*) is about to tender her alliance, and that Dharma (the Virtuous Life) wavers between the opposing parties. Obviously the allegorist cannot blink the fact that his theological opponents, whom he wilfully confounds with the enemies of Religion generally, regarded Dharma with as much respect as he did. The Buddhists preached, and perhaps practised, morality; while the Vaishnavite doctrine of faith without works has led from the times of *Chaitanya* to our own into lamentable abuses. Heresy next comes forward, as in more modern days, to effect a breach between Reason and Revelation, and amid these abstractions the Act closes.

The characters of the next Act are more human, if not more attractive. Three religious mendicants meet, and get drunk together,—a naked Jain (*Digambara*, or one whose garment is space); one of the disgusting *Kapâlikas* who pretend to feed on

a human skull ; and a Buddhist ascetic. Of course they plot against religion ; for monks in the storybooks are always devotees of sensual pleasure—witness Rabelais, and the rôle played by the Cordeliers in Margaret of Navarre's lady-like novels. They would draw her forth from her hiding place if they knew where to find her, but, says one, she is not in the waters, she is not in the mountains, she is not in the regions beneath the earth ; she is found only in the hearts of the virtuous,"—which reminds us of the passage in Deuteronomy :—"It is not in heaven . . . neither is it beyond the sea . . . but the word is very nigh unto thee, in thy mouth and in thy heart, that thou mayest do it."

The fourth Act brings us again among the abstractions ; Religion enters, trembling from recent perils, to prepare the way for Reason, who is marshalling his army for the great battle. He approaches Benares, and gazes with astonishment on the splendour of buildings which have stolen its whiteness from the moon, on the splashing of fountains, the flags that glimmer like lightning on the edges of an autumn cloud, and the gardens filled with lofty trees and flowers of delicious scent. He enters the temple of Vishnu, and addresses in prayer the universal soul, "who alone can release the world from that delusion in which matter and spirit appear diverse." In the next Act the battle has been fought, and Religion, though her side is victorious, grieves over the death of many of her relatives, who were found on the side of heresy ; an eye-witness describes the battle, in which the final victory was wrought by Saraswati, the goddess of speech, girt with the beneficent influences of Vedas, Upavedas, Vedângas, Purânas, law-books, legends, and all holy books. Some heresies are destroyed by other heresies ; some are borne down by floods of holy lore. Buddhists fled in confusion to countries tenanted by outer barbarians—Sind, Kandahar, and the eastern coast. The Jainas concealed themselves among the blockheads of the west. Discrimination slew Love, and all went well, except that Delusion had escaped and concealed himself, in company with the magic of the Yogas.

In the last Act the union between Reason and Revelation is finally consummated, amid much discourse to show how man can be emancipated from mortal life, and partake in the condition of the spiritual and the unchanging. And in the closing scene appears Purusha, the transcendent spirit or Demiurgus, and welcomes the Moon of Awakened Intellect, which has at last arisen, and swallowed up Delusion and his

votaries. The Transcendental Man exclaims :—"The veil of darkness is lifted. Morning breaks. I scatter from me the blackness of delusion. I cast off the sleep of doubt. Now I am Vishnu, through whom the world becomes filled with religion, reason, understanding, tranquillity and control of the senses. Now I have no wishes—no wish to see any one, to ask anything, to seek any doubtful reward, either here or beyond; but, tranquil and removed from care and delusions that engender fear, I will live to myself the life of a pious anchorite."

There is much that is interesting in a drama of this character (of which we have given but the faintest outline), though to our minds the conception of a number of abstractions, speechifying after their kind, is worn too threadbare for attractiveness. It is curious to see how religious problems present themselves in all ages in the same aspect; and how the alliance of vice with heterodoxy, which history repudiates, is ever insisted on by the dominant party.

After a chapter on lyric poetry, and five chapters on the principal works of fiction—the Panchatantra, Hitopadesa, Kathâsarit-sâgara, Vetâla-panchavinsati, and Dasa-kumâra-charitra—with which we shall not on this occasion detain our readers, we arrive at the concluding chapter of the work, headed "Commerce and Manufactures," which is hardly long enough to do justice to a most interesting subject. Lassen has worked out the early commerce of India in his usual painstaking way from a few scattered hints, and every future writer must base his account on Lassen's; for though this author frequently betrays a want of judgment in his use of authorities, and though he is too anxious to come to a conclusion of some sort on every doubtful point, he has the merit of a thorough and complete knowledge of the literary aids to his subject. He is deficient in the imaginative power which a model historian possesses, but his fairness and completeness enable those whose knowledge is mainly drawn from his treasury to correct many of his errors and revise his work, and his volumes will long remain our principal store-house for the knowledge of ancient Indian history. An exact translation of Lassen would be of great service in this country, where many who have the willingness to work are unable to use the German text, for it would show each explorer, in his own province, what facts have been learnt, what conclusions attained, and what remains to do.*

* The writer was at one time willing to undertake this work, on condition of the support of the Royal Asiatic Society; but the President, the

The principal sources of our knowledge, such as it is, of early Indian trade, are derived from scattered hints in the ancient authors of the west, beginning with the Hebrew scriptures, and from several passages in the Mahâbhârata, notably the enumeration of the gifts that were brought by the various nations to the great Râjasûya of Yudisthira. Chinese authorities furnish us with an account rather of unsuccessful efforts made to establish a trade than of actual interchange of goods. Some such commerce, no doubt, dribbled, so to speak, through the western passes of the Himalâya, but the Chinese and Indian empires were too self-contained, possessed to too great an extent in themselves all the materials for the necessities and luxuries of life, to render them dependent on one another. The first trade between the west and India of which we have definite knowledge, was that carried on by the Phœnicians and Hebrews from Elath and Eziongeber on the Red Sea; and the account we have of this trade, implies on the part of the Phœnicians a previous acquaintance with the route. Lassen

late Lord Strangford, strongly opposed his plan (which was to confine himself to a faithful translation of what Lassen had actually written), on the ground that "the translation, to meet the wants of the present age, would have to be executed with reservation and criticism at every step; the book would have here to be re-arranged, there to be summarized; here to be amended, there to be shortened and pointed—and critical notes and new modifying matter would have always to be introduced. If not, an English translation of Lassen would merely take the position of the English translation of Bopp's *Vergleichende Grammatik*—a standing example of the dangers of mere mechanical translation from German into English." The writer confessed his incompetency for a task of this kind, and expressed a doubt whether it would ever be undertaken on these conditions; for a scholar who felt himself competent to recast Lassen would prefer to direct his energies to original work. From a further communication, it appears that two MS. translations of Lassen's vol. I. (of course from the old edition), one being by a daughter of Professor Wilson, are in existence, and that the Council of the Asiatic Society agreed with their President, "that no part of Lassen's work is so perfect as to be free from the necessity of addition, modification, or correction in detail." The opinion of such a body is of course based on thorough knowledge; but a distinguished member of the Indian Council assured the writer, in tones which brooked no denial, that a translation of Lassen had already appeared in the *Bengal Asiatic Society's Journal*. He regarded the four volumes of the *Alterthumskunde* as nothing more than a treatise on coins! What is to be regretted is, that for want of some such help, vigorous writers are constantly wasting their time on work which is already done to their hand, and stating conclusions which have already been established or exploded. We commend the question to the notice of the Bengal Asiatic Society, whose learned Secretaries are not likely to undervalue their compatriot's great work.

supposes that they may have discovered it when in possession of their original insular strongholds of Tylus and Aradus in the Persian Gulf; but this is a mere guess, deprived of value by the doubt which attaches to the story of the original Phœnician migration from those islands, against which Movers, the erudite historian of the nation, long ago declared himself. That the trade from the Red Sea actually was concerned with Indian products, there can be no reasonable doubt; though the question has been complicated by the attempts made to establish the position of Ophir. M. Quatremère in a paper in the *Mémoires de l'Institut* declared himself in favour of some point on the east coast of Africa, probably "Sofala, thought Ophir," but his argument leaves entirely out of sight the linguistic evidence for the Indian origin of some of the staples of the trade. Sir Emerson Tennant supposes the Malayan peninsula to be meant, but there is no difficulty, except as regards the gold, in tracing all the products to points nearer home; and it is most unlikely that so distant a region would have been visited so early. It is true, however, that the Indo-Chinese peninsula, the Chryse of the Greeks, the *Suvarna-bhūmi* of the Buddhists, and the Aurea Chersonesus of later times, was regarded in ancient days as a great store-house of the precious metals.* Lassen and Gesenius argue for an Indian Ophir, mainly on the strength of similarity of names; but their force, which, if united, would be strong, is weakened by the fact that their identifications differ. Lassen connects Ophir with the Abiria of Ptolemy at the mouth of the Indus, and with the caste of Ahirs or cow-herds, still to be found in that neighbourhood; while Gesenius, remembering that the LXX form of the word is Sophir, identifies it with the Greek Souppara (*Surparâka*) far down the west coast. The difficulty in this view is that it represents India as a gold-producing country, whereas gold has never been found except in the washings of a few mountain-streams, and there could have been no time when India produced gold more than sufficient for its own requirements; for Lassen's dream of immense gold-washings on the upper Indus and the Gilgit rivers is based on the scantiest groundwork of facts. It seems to have been left to the Hon. Edward Twisleton, a contributor to Smith's Dictionary, to

* Pliny, vi. 23, shows a confused notion of its situation. "*Extra ostium Indi, Chryse et Argyre, fertiles metallis, ut credo. Nam quod aliqui tradidere, aureum argenteumque iis solum esse, haud facile crediderim.*"

observe what seems obvious enough from the text, that the Indian products are nowhere stated to have been brought from Ophir; the language even suggests a distinction. The fleet brought gold from Ophir, and allmug-trees, and precious stones; and it also brought (presumably *not* from Ophir) ivory and apes and peacocks. Now if Ophir was, as after all there seems reason to believe, a country on the south coast of Arabia, which had extended commercial relations, it does not much matter that gold is not now produced in Arabia. We know that gold was brought from the Arabian Sheba or Saba;* the ancients generally regard Arabia as a gold-exporting country; and there must have been on its coast a great emporium for gold and jewels, from whatever country brought. Besides these the only product distinctly ascribed to Ophir was the word called *almuggim* or *alummim*; which Lassen identifies with sandal-wood on the strength of a Sanskrit synonym for the latter, *valgu*, forgetting that Hiram cut *almug* logs for Solomon on Lebanon, and that *chandana*, not *valgu*, is the universal Sanskrit name for sandal-wood—a name so widely diffused as to be given to an island not far from the coast of Australia. The difficulty of the triennial voyage to a country so near as the south coast of Arabia, is got over by the consideration that Ophir is nowhere stated to be the *terminus* of the voyage, which was probably continued as far as the Malabar coast, whence the ivory, apes, and peacocks must have been procured. For the peacock is a characteristically Indian bird; inhabiting the whole of the Indian and Indo-Chinese regions, it is not found in the countries west of the Khyber; *tukki*, the name given to it in the Hebrew text, is identical with the Tamul and Malabaric *togei* and the Singhalese *tokei*; *kuph*, 'ape' is the Sanskrit *kapi*; ivory is *shen habbim* or tooth of *habbi* which seems to represent the Sanskrit *ibha*, an elephant.† There are other circumstances which seem to point to a trade connection of India with the south of Arabia, and verify the conclusion that the trade between India and the

* See i. *Kings* x. 2., *Ps.* lxii. 15. The genealogist of *Genesis* x. obviously regards Ophir as Arabian.

† From this same word *ibha* has been derived *elephant*,—*al-ibha-danta*, the Arabic article implying through what channel ivory was introduced into the west; the name was no doubt applied to ivory (as in Homer) before the animal which produced it was known,—a consideration fatal to the claims of another etymology, *eleph-Hindi*, the Indian ox; that of Pictet, from Airavata the elephant of Indra, is fanciful in the extreme.

countries north of the Red Sea rested upon that region as a middle point or fulcrum. There are traces of Indian (especially Malabaric) habits and customs in southern Arabia, such as the division of castes, and a marriage-system like that of the Nairs; there was a city in the same region named Nagara. Again, Pliny says that ships sailing from the Red Sea made for Zizerus, a harbour of the west coast of India, which may be the Jinjira so long occupied by the Sîdis or Habshis, chieftains of African descent; and if so, takes its name with little doubt from the Arabic *jazira*, an island. These notices perhaps refer to a later time; but the mention of tin and cotton under Sanscrit names and of sindones or Indian muslins, show that the products of India found their way, probably by sea, as early as the times of Homer and Herodotus, into western markets.* In the Roman times a regular and most productive maritime trade had set in; and we find in full operation that drain of the precious metals to the east which is one of the best known economic phænomena of our own day; for the natural wealth of India made her independent of all other countries in respect to every article except gold and silver, and though the manufacturing advantages of England have in the present century tended to develope an import trade, it is never likely to equalise the export from India to the rest of the world.

That very self-sufficiency has prevented the growth of any important landward trade. There could be no mutuality between India and a plateau like Thibet, which supplied nothing of what India wanted, except yaks' tails and musk. Some slight commerce was kept up with the countries of the north-west angle; and Kabulis brought strings of horses to the court of Yudishthira, as they bring them to-day to the marts of Bengal and the Dekhan; from that corner too, after the establishment of Chinese dominion in Central Asia, would creep in, slowly enough, the first specimens of the manufactures and products of the Middle Empire. Lassen is convinced that the *Mahâbhârata* describes silk among the gifts brought by the northern tribes, but if silk is really meant, the compiler is guilty of an anachronism, for we know that silk first reached Khoten during the reign of the emperor Wu-ti of the Han dynasty, about the commencement of the first century

* Nard and cassia are also traced to India, though Lassen has succeeded in proving that the genuine cinnamon, now produced exclusively in the East, was originally a product of Zanzibar or the Somali country.

B.C., and that his general, Chang-kien, failed in his effort to establish a regular trade with India. Nor can we suppose a regular communication to have been opened till the Yuei-chi succeeded in obtaining an Indian dominion.

Here we take leave of Mrs. Manning, reiterating our conviction of the usefulness of her book, and our admiration for its good workmanship; and with an apology to her for having made her writings in so many cases merely an excuse for digressions and excursions of our own into the fields of Indian history.

CRITICAL NOTICES.

Die Bhagavadgitá. Uebersetzt und erläutert von Dr. F. Lorinser. Breslau. 1869.

THIS is a translation of the *Bhagavadgitá* into German verse, the metre of which is intended to be a Teutonic imitation of the Sanscrit Sloka. It is accompanied with copious notes, which are occasionally intended to justify slight departures on the part of the author from the translation of his predecessors, Schlegel, Lassen, Thomson, &c. But they are directed, as a general rule, towards proving what is the dominant idea of the work, the supposition that the author of the *Bhagavadgitá* borrowed largely from Christian sources. We will leave the translator to tell his tale in his own language. "I approached the study of the *Bhagavadgitá* with respect for its great antiquity. But I found in it striking resemblances to many passages of the Old Testament and to Christian ideas and doctrines, which at first I supposed to be accidental or fragments of the primeval revelation. But when I found these resemblances perpetually recurring, and especially when I was struck with the remarkable resemblance between the revelation of the divine form of Krishna, and the transfiguration of Christ upon Mount Tabor, I began to think a literal borrowing from Christianity probable, especially as the traces of it seemed to me to be found throughout the poem. Then I began to give up my previous opinion of the antiquity of the *Bhagavadgitá* derived from Schlegel, and to consult Lassen and other writers with respect to the age of the poem, and I soon attained the reassuring conviction, in which I was confirmed by Dr. Stenzler of Breslau and by Professor Weber of Berlin, that there were no chronological objections to supposing a post-Christian date for the *Bhagavadgitá*, and that the same opinion was held by Lassen, though not based on the special grounds which influenced me. I hope in the present work, first in the commentary, and especially in the appendix, upon the traces to be found in the *Bhagavadgitá* of a familiarity with Christian writings and Christian ideas, to prove satisfactorily, that the supposition of Christian doctrines

“and even the New Testament itself having largely influenced the composition of the *Bhagavadgītā*, is something more than a mere hypothesis.”

After acknowledging his obligations to the previous editors of the *Bhagavadgītā*, and to the translations of the *Upanishads* published in the Bibliotheca Indica, the author goes on to express his conviction that the *Bhagavadgītā* must always be of great importance to the philosopher and to the theologian. He consoles himself for the destruction of the idol which he formerly worshipped—the antiquity of the *Bhagavadgītā*—by some remarks from Max Müller to the effect that negative results are not always worthless, “for in true science even a disappointment is a result.” At the same time he observes that he can scarcely speak of himself as disappointed or *désillusionné*, “for it would be a real solace to him to find that the present work contributed in any degree to the glorification of the only divine revelation, that of Christianity, even if it were at the cost of destroying some illusions with respect to the worth and excellence of Indian wisdom.”

After a perusal of the translator's commentary, we have come to the conclusion, that he gives the supporters of the great antiquity of the *Bhagavadgītā* some very hard nuts to crack. Not that he will get them cracked or even appreciated, for the main supporters of the antiquity of every Hindu religious work are natives, and in the present contemptuous ignorance which they cherish with respect to all western knowledge which does not lead directly to a Government appointment, it is too much to expect that they should take interest in anything which runs counter to their favourite beliefs. Besides, most of the quotations from the New Testament are given in Greek, and reasonably enough, as the resemblance is likely to be more striking in the original language than in translations. The translator also quotes passages from the Alexandrine fathers, which show that the lively intercourse known to have subsisted in the early centuries of Christianity between Alexandria and India was not merely commercial. In the appendix he gives a list of parallel passages from the New Testament and the *Bhagavadgītā*. The first class consists of those which are similar in sense but not in expression; the second of those which are similar in expression but not in sense; the third of those which are similar both in sense and expression.

Moreover he supports his general position by arguments drawn partly from his own investigation, partly from Weber, Talboys Wheeler, and other scholars. We proceed to give a brief abstract of them.

It is certain that the *Bhagavadgītā* belongs to a post-Buddhistic epoch, and there are good reasons for supposing that it was composed centuries after the Christian era. How long after cannot be determined, until the date of Sankara who wrote a commentary upon it is fixed. He is generally supposed to have lived in the eighth century after Christ. From this Lassen concludes that the *Bhagavadgītā* must have been written much earlier, —about three centuries after Christ. If this be the case, it is quite possible that the author may have been acquainted with the Christian books, as Eusebius tells us that Pantænus, who travelled as a missionary to India in the second century, found there a copy of the Hebrew gospel of St. Matthew which had been carried there by the apostle Bartholomew, and that he brought it back to Alexandria. Moreover we learn from the evidence of Chrysostom that the New Testament was translated into some Indian language. The passage, which the author remarks has been overlooked by other scholars, is found in Chrysostom's Homilies upon St. John, cap. I, and is as follows:—
 “Moreover the Syrians and the Egyptians and the Indians and
 “the Persians and the Ethiopians and countless other nations,
 “having translated into their own languages the doctrines
 “promulgated by him, have learnt though barbarians to
 “philosophize.” Chrysostom died in 407 A.D., so the translation he mentions must have been in existence a century earlier. Besides it is quite possible that the learned Bráhmaṇ who composed the *Bhagavadgītā* may have been able to peruse the New Testament in the original language, especially as the *Bhagavadgītā* shows traces of an acquaintance with the Wisdom of Solomon, which was originally written in Greek.

But is it probable that a zealous Bráhmaṇ would have condescended to incorporate into his system Christian doctrines and maxims? The translator thinks that he can answer this question in the affirmative. The author of the *Bhagavadgītā* evidently belonged to the sect of the *Vishnu* worshippers, for he considers Vishnu as the supreme god, and looks upon Krishna as an incarnation of him. But Weber holds that this worship of Krishna was to a certain extent borrowed from Christianity, that is to say, that those Indians who travelled to Alexandria,

when they returned, transferred to their hero Krishna some of the attributes of Christ. The reasons upon which Weber bases his belief are as follows :—

(1). It is evident that in the early centuries of the Christian era there was a perpetual action and reaction going on between Gnostic and Indian doctrines.

(2). The adoration of Krishna as the one god is one of the latest phases of the Hindu religion, and was apparently not developed even in the time of Varáha Mihira who mentions Krishna, but only in a cursory and careless manner.

(3). It is hard to reconcile this high elevation of Krishna with his previous position in Bráhmaṇa story, unless we suppose some external influence to have been brought to bear.

(4). The story in the Mahábhárata of Swetadwipa and the revelation which Bhagavat there makes to Nárada, shows that the existence of such an influence is perpetuated in Hindu tradition.

(5). The stories of Krishna's birth, the celebration of his birthday, the adoration of his mother Devakí, and above all his life as a shepherd, which is the most strongly opposed to the original tradition, can only be explained by the influence of Christian legends.

Dr. Lorinser remarks that Mr. Talboys Wheeler holds the opinion, that some of the Krishna legends are a "travesty of Christianity," and quotes a passage from his history in support of his assertion. We believe we are right in asserting that the Rev. K. M. Banerjea holds the same opinion. And Professor Cowell observes that the *ekantinah* or worshippers of the supreme, whom Nárada found in Swetadwípa may have been Christians of Alexandria. The same opinion is held by the anonymous reviewer of Mr. Wheeler's work in the *Athenæum*.

In conclusion Dr. Lorinser meets an objection which might be brought against his position. Many expressions in which the *Bhagavadgítá* resembles the New Testament are found to exist in the *Upanishads*, which are generally supposed to be of older date. The *Upanishads* most intimately connected with the *Bhagavadgítá* are the *Swetáswatara*, *Kathá*, *Mundaka* and *Prasna* *Upanishads*. Dr. Lorinser thinks it quite possible that the *Swetáswatara* *Upanishad*, which he considers the oldest of these may have been largely influenced by Christian thought. He quotes from Wilson to prove that "Siva in his form as

"Sweta (white) had four pupils—*Swetāsua*, *Sweta* (white), "*Swetasikha* (white hair), *Swetalohita* (white blood)." This story he believes to refer to some mission of Syrian Christians.

Interesting and probable as this theory of Dr. Lorinser's may be, one cannot help considering it as part of a wider question. The connection between Hindu and Greek logic and philosophy is one of the yet unsolved problems lying before Orientalists. Those whose studies may have lain rather in the early Greek philosophers than the early Greek fathers* cannot help recognising many familiar ideas in the *Bhagavadgītā*. The idea of an infinite succession of worlds is found in Anaximander. The *apeiron* of the same philosopher is very like the *prakriti* of the *Bhagavadgītā*. The soul of the world of Thales may be compared to the *purusha* of the Hindu philosopher. The *enantiotetes* of Anaximander and the *aer* of Anaximenes may be paralleled by the *āwandwas* and *ākāsa* of the Brāhman. Every one knows that the transmigration of souls held by Pythagoras, is the cardinal doctrine of Hindu philosophy. The "*tōs genesis men apesbestai kai apistos olethros*" of Parmenides is really the key-note of the *Bhagavadgītā*. It would be easy to multiply instances. But we have said enough to show how tempting it is to rush to general conclusions on this subject, and how uncertain all such conclusions must be at present. Further investigations may shed light, where all is now doubt and conjecture.

We cannot attempt of course to pronounce on the success of Dr. Lorinser's rhymeless version. Any attempt to imitate the Sanscrit *Sloka* in English would, we are convinced, be a failure, and result in a merely Iambic rhythm. We venture to subjoin an attempt to represent in a rhymed version that magnificent speech of Arjuna, in which he expresses the despondency which moves the incarnate God, who is serving as his charioteer, to explain to him the mystery of the universe and his own glorious all-pervading divinity. We have also attempted the beginning of Krishna's speech, which entitles the author of the *Bhagavadgītā* to rank with Lucretius as a philosophic poet. In this part of the poem, at any rate, the follower of Patanjali does not yield in lofty confidence and prophetic fervour to the follower of Epicurus.

* Dr. Lorinser is, we presume, a Roman Catholic, as he occasionally speaks of Protestant ignorance with a discreet pity.

Arjuna spake.—

When I behold my valiant kin all thirsting for the fight,
 My knees are loosed, my mouth is dry, and tear-drops dim my sight ;
 My hair all upright stands from fear, slips from my hand the bow,
 My stalwart limbs with horror quake, my skin is all aglow.
 Oh ! Kesava, I scarce can stand, for giddy whirls my brain,
 And strange ill-boding sights I see, and monstrous shapes of pain ;
 No heavenly bliss can be my lot, the slayer of my kin ;
 How can I long for victory or empire, dashed with sin ?
 Those for whom kingly power we prize, and joys and wealth and life,
 Leaving their wealth and happy lives, stand ranged for mortal strife.
 Preceptors, fathers, grandsires, sons, though foes, I could not slay
 To gain three worlds—much less for this, the empire of a day.
 If we slay Dhritarâshtra's sons, though dead to sense of right,
 Shall we not lose those blissful worlds, and sink in endless night ?
 Though these, with minds obscured with lust of gold and kingly state,
 Shrink not from slaughter of their tribe, fear not the awful fate
 Of those whose hands are red with blood of kinsman and of friend,
 Shall we not dread their fearful crime—their still more fearful end ?
 When falls the tribe, then long-revered primeval custom fails ;
 When law is broken and o'erthrown, the lawless will prevails ;
 When lawlessness infects a tribe, then women are made base ;
 When women sin, then springs to light a mixed unhallowed race.
 Then sink to hell alike defiled the slayers and the slain,
 Nor longer can departed sires their blessed world maintain,
 Cut off from holy offerings, they fall and curse their sons ;
 Thus upward, downward, through the race the foul infection runs.
 Then awful is our sin, who, drunk with blind ambition's wine,
 Can long to shed the sacred blood of our own royal line :
 Ah ! better far, if standing here with undefended head,
 Unshielded breast, unsworded hand, some foe should strike me dead.

Krishna then begins to console him in the following words :—
The Holy one spake.—

Though wise thy words, thou weep'st for those for whom men may not weep ;
 The sages shed no tears for those who live nor those who sleep.
 For never was when, thou and I and all this mighty host
 Did not exist, nor can we cease, in vacant darkness lost.
 As in this mortal frame the soul sees childhood, youth, and eld,
 So after death it wanders on through myriad births impelled.
 These elemental contacts, king ! the source of joy and woe,
 These thou should'st bear with steadfast mind, for these but come and go.
 For whom these move not, undisturbed in pleasure and in pain,
 That man is fitted, Lord of men ! for an immortal reign.
 That which is not can never be, nor that which is, decay,
 That mighty soul which all sustains unresting, none can slay.
 These dying bodies are instinct with one undying soul,
 How can that kill or die which aye informs this mighty whole ?
 It is not born, it does not die, it was not, nor will be ;
 Though pierced its shell, eternal still, from all destruction free.
 For as a man flings off his robe by constant service worn,

E'en so the soul flings off its slough, in other bodies born.
 It is not whelmed in floods, nor parched with blasting whirlwind's breath,
 It does not fear the rushing flame, nor hissing bolt of death.
 Then weep not thou for that which holds secure its changeless state ;
 Pervading all, though unperceived, it laughs at time and fate.

Use of the Barometer in Surveys and Reconnaissance. By
 Lieut.-Col. Williamson, U. S. Engineers. Being No. 15 of
 the *Series of Professional Papers of the Engineer Corps,*
 U.S.A. Trubner & Co. London.

THIS is a handsome quarto volume, well printed and carefully illustrated, embodying the results of the most extended series of hypsometric observations hitherto executed on the North American continent—a field of exceptionally high promise to the meteorologist.

The history of the work is soon told. In 1853, detachments of the U. S. Topographical Engineers were engaged in running trial-sections for the projected line of railway from the Mississippi to the Pacific. In the absence of any standard authority upon barometric surveying, the arrangement of the details of the survey was left to the individual discretion of the officers in charge of parties. Of these the author was one. The results were for all practical purposes very satisfactory, but the erratic nature of many of them gave rise to much subsequent study and to fresh observations. These investigations are now put forward in the volume before us.

The nature of the country over which the operations were conducted is best described in the author's own words :—

“The coast line of California extending from near the 32° to
 “42° of north latitude has a general direction north-west, but it
 “is in the shape of a bow, so that the direction in the northern
 “part approaches more nearly to the meridian line. Parallel to
 “this is the Coast Range, the crests of which are from 10 to 60
 “miles from the coast, with foot-hills or spurs extending to it.
 “This range is broken by the bay of San Francisco, called in its
 “northern and eastern parts San Pablo and Suisun, which receives
 “the waters of two considerable streams, the Sacramento and the
 “San Joaquin. These flowing parallel to the coast, the one from
 “the north and the other from the south, unite to find an outlet
 “through this bay to the sea. The Coast Range is comparatively
 “low in the middle of the State, its average height between the
 “36th and 39th parallels being between 2,000 and 4,000 feet,
 “with peaks rarely reaching to 5,000 feet. To the north and

“ south of these parallels, however, it approaches to double these heights. It is generally wooded to the north of San Francisco, but to the south the hills are often bare.

“ The valley east of the Coast Range extends from the 35th to the 41st parallels, and is for the most part 50 miles wide. It is destitute of trees, except on the banks of the streams, and presents to the eye an unbroken plain.

“ Still more eastwardly, parallel to the coast and about 170 miles from it, is the highest mountain range in the United States, which maintains its general elevation through Oregon or Washington territory to the British possessions, and the territory of Alaska formerly the Russian possessions. The passes in this range are from 5,000 to 12,000 feet in absolute height. The height of the peaks is less in the central part of the State, but to the south they rise to 14,000 and 15,000 feet. The slopes are heavily timbered.

“ This range, which is called the Sierra Nevada in California, and the Cascade Range to the north of it, unites with the Coast Range about the 35th parallel. Between the 41st and 44th parallels the country is one mountain mass, with, however, many small elevated valleys. Between the 44th parallel and the Columbin river, the Willamette river has a large valley, and the distinction between the Cascade and the Coast Ranges is again marked.

“ East of the Sierra Nevada and Coast Range, and north of the 35th parallel is a vast elevated district which Freemont has called the Great Basin, and which extends eastward in the north part of the Rocky mountains and the south part of the Colorado river.

“ This has a general height of some 4,000 feet, but is interspersed with numerous ridges and isolated peaks, some of which, as the Warner Range, in the north-east corner of the State of California (which has sometimes been improperly called the eastern spur of the Sierra Nevada) are from 9,000 to 10,000 feet high. This basin is almost entirely destitute of timber. In it, and but 100 miles east of the highest peaks of the Nevada, is a remarkable depression called Death Valley, the sink of the Amargoza river. It is a valley over 30 miles long, and estimated from reliable barometric observations to be 175 feet below the sea-level.

“ This generally elevated region terminates at about the 34th parallel ; and south of it, and between the Colorado river and

“ the Coast Range, is what is called the Colorado Desert, some parts of which are also below the sea-level.”

These varied topographical features are necessarily accompanied by very marked climatic differences. “ If a traveller were to leave San Francisco,” says Col. Williamson, “ and go in a direction at right angles to the coast, he would find in the space of 200 miles at least *four* different varieties of climate. At the sea-coast the temperature is modified by the ocean, and as almost constant westerly winds prevail laden with moisture, the sea-coast climate is much more uniform than that of the Atlantic.

“ In San Francisco the mean temperatures in the warmest and coldest months only differ 11° Fahrenheit. The daily range of the thermometer is also quite small.

“ Passing into the Sacramento valley, a marked change is felt. At Sacramento city it is not so decided, because the opening in the Coast Range made by the bays and the rivers allows the sea-air to penetrate to a certain extent as far as the city. But in the northern and southern parts of the valley, opposite which the Coast Range is higher and further from the coast, thus affording a more sufficient barrier to the passage of moisture from the sea, the seasons are much more marked, while the daily range of the thermometer is large.

“ Leaving the valley and ascending the western slope of the Sierra, the climate is modified by the elevation ; but this is not the only cause of the change. The heat of the vast plains has caused much of this moisture from the sea to rise in the form of elastic vapour, which is wafted by westerly winds to the higher portion of the Sierra, or to the upper regions of the atmosphere. Hence the western slope and particularly its lower portion has a much drier climate than the valley ; and radiation by night and absorption by day go on more rapidly than on the plains below. This cause is not so active in winter, when the wind is more variable, and where masses of snow are accumulated upon the higher ridges ; but at midsummer the temperature on the foot-hills, 2,000 feet above the sea, is often the same as, or higher than at Sacramento. The relative humidity is also higher at that season than at Sacramento, or higher up the Sierra. The consequence is, on the western slope of the mountains the daily range of the thermometer is large, as is also the variation during the months.

“ Passing now over the crest of the mountains, and descending to the treeless basin below, we have excessive dryness. Though there are large lakes near the eastern base, the power of the sun is so great in summer that the lower strata of the air, except immediately over the lakes, are almost devoid of aqueous vapour during the day. It is not unusual to find a difference between the wet and dry bulbs of the psychrometer of as much as 35° Fahr., and I have seen observations from stations still futher eastward where it reached 40° Fahr. The daily range of the thermometer is of course immense. It is quite common to have a temperature of 80° Fahr. in the heat of the day *in the shade*, and ice to form at night. The change in the seasons is very decided, though the winters are not so severe as in similar altitudes and latitudes upon the Atlantic coast.

“ The Colarado Desert seems to have a climate similar to that of the Great Basin, due allowance being made for the difference in elevation. Being 4,000 feet lower, and in a more southern latitude, the summer heat is excessive. Frequently the temperature increases to 120° Fahr. *in the shade* in the hottest parts of the day. No extensive series of observations has been taken there, but at Fort Yuma on the Colorado river, which terminates the vast plain called the Desert, the climate is more humid than to the north.”

Within the above area observations were taken at thirty different stations, of which eight were on or near the coast line of Oregon and California, at or about the sea-level; two were on the base and summit of Mount Diablo, the highest point of the Coast Range, situate about 30 miles from San Francisco, having an altitude by the spirit-level of 3,856 feet; three were in the open valleys of the Sacramento and St. Joaquin; thirteen were upon the Sierra Nevada, at altitudes of from 2,000 to 7,000 feet; one was in the depression known as Death Valley; two were on the banks of the Colorado, the first at 60 and the second at 220 miles in a right line from the coast, and one was in Arizona. In some instances, as at San Francisco, the observations were made hourly for 10 or 15 days in each month, for several years; but in the majority of cases they were for broken periods. The results have been classified, and collated with series from foreign observations.

Col. Williamson complains of the great difficulty he experienced in obtaining such series from *altitudes exceeding*

1,000 feet above the sea-level. He admits that a thorough investigation of the effects of the diversities of the climate in the region in which his observations were made upon hypsometric results, would necessitate a more numerous and extended series, but nevertheless he trusts "that the results given in his pages will not be found void of novelty and interest."

Our limited space forbids our entering upon a discussion of these results, and we must therefore confine ourselves to an indication of the general character of the contents, and the expression of a hope that the work may receive at the hands of practical meteorologists an amount of attention commensurate with the care and research which appear to have been bestowed upon its production.

It is divided into three parts—two of which are critical and investigatory, the third consisting of tables designed to facilitate hypsometric calculations. The first portion commences with a chapter upon "horary oscillation." Long as this phenomenon has been recognized (under the various designations of "diurnal" or "semi-diurnal variation," or "variation during the daily period," &c.), its effect upon barometric calculations has not been generally appreciated.* Colonel Williamson takes the credit to himself of having invented a method, which he terms "*reduction to level*," by which he is enabled to obtain a horary table (usually accurate enough for all practical purposes) from a *few days'* observations, thereby avoiding the labour, often impracticable, of collecting a series extending over a lengthened period. His general conclusions upon this subject as affecting hypsometry are probably important.

The second, and perhaps the most interesting portion of the work, is devoted to an investigation of numerous barometric admeasurements, with a view to the determination of the degree of reliability to be attached to them and the detection of the sources of error in each, and to the discussion of some of the co-efficients employed by different physicists.

Colonel Williamson is disposed to take exception to the importance assigned to barometric altitudes by certain scientific writers. For example, Guyot, in the preface to his *Hypsometrical Tables*, speaks of "the close agreement of the determinations furnished" by La Place's formula in barometrical measurements, carefully

* Within the limits of the United States the amount of this oscillation varies from 40 to 120 thousandths of an inch of the barometric column. Each thousandth is approximately equal to 1 foot of altitude.

“conducted under favourable circumstances, with those obtained “from repeated trigonometrical observations.” Of this he cites a few striking instances:—“Mont Blanc was found from observations on the 29th August, by means of nine corresponding “stations, to be 4,810 *metres* (15,781 feet), while the mean of “seven of the most elaborate and reliable geodetic measurements, “which cost 20 years of labour, was 4,809·6 *metres* (15,781 feet). “Mount Washington gives by the barometer 6291·7 feet, and by “level 6,293 feet. In North Carolina, two stations gave respectively 6,710 and 5,248 feet by the barometer, and 6,711 and 5,246 “feet by level.” Again, in an article on the Barometer in the *New American Cyclopædia*, we read that “by the perfection now “attained in the construction of these instruments, and the “skill applied to their use by the best observers, differences of “elevation may be ascertained by them with greater accuracy “than by the most careful triangulation.”

Such remarks, the Colonel considers, are calculated to mislead, inasmuch as they require acceptance under certain reservations, which are by no means obvious.

He considers that although a few observations at the summit and base of a mountain, carefully taken under favourable circumstances, will give its altitude with as much accuracy as is ordinarily expected in a rough and rapid reconnaissance, such observations are not sufficient to determine the relative merits of barometric formulæ. For the latter, long series of indubitably reliable observations, such as can only be looked for in fixed observations of a scientific character, are required, and of these, he adds, “there is scarcely more than one with an altitude much over 1,000 feet above the sea-level.”

The Bazaar Book, or Vernacular Preacher's Companion.

Originally prepared in Tamil by Rev. H. M. Scudder, D.D. American Arcot Mission. Translated by Rev. J. W. Scudder, M.D. Madras. Graves, Cookson & Co. 1869.

THIS is a small book of 233 pages, issued, as we learn from the preface, under the auspices of the “Publishing Committee of the American Arcot Mission.” The preface closes with a “Note to Translators,” bearing the signature “J. Murdoch,” stating that “the translation (into English) has been printed chiefly to facilitate the reproduction of the work in the various languages of “India.”

For the purpose for which this book has been put before the missionary body we are compelled to regard it as a failure. We presume that the gentlemen who are responsible for its publication consider that it supplies a distinct lack in missionary literature. It is indeed a contribution, but it is like giving crutches to a man who can walk without them ; they are not only unnecessary—they are an incumbrance. A man might furnish himself with all the Bazaar-books that could ever be published ; and yet, till he either make one for himself or abandon such things altogether, we despair alike of his common sense, of his efficiency and of his usefulness. It is very much the same as if one of our ministers at home should preach other men's sermons, or the outlines given in books of skeletons of sermons : with this important exception, however, that the English preacher would be quoting at any rate a Bible which he knows and is able to read, while in using such a book as this the preacher would be for the most part but a blind leader of the blind.

The fact is that the whole question of the kind of education suitable for men who are designed for mission-work is one which needs investigation by our Societies. There are comparatively few men who come to India for this work who possess any really accurate ideas as to the nature of ' the situation ' till experience teaches them. For the most part they do not know a word of the languages ; they have the very vaguest notions of the religions, philosophies and histories of the people ; and no adequate idea of their customs and true character. The economy of our Missionary Societies is about as exemplary in this respect as it is in some others. We hold that every candidate for mission-work should, prior to his being definitely accepted and sent out, be expected to pass satisfactorily some sort of examination in Indian subjects. Suitable provision should be made in connection with at least one of the Theological Colleges of each denomination for the study of one of the classical languages of this country—Sanskrit or Arabic—and *that* one of the vernaculars which he is most likely to need. He should also be afforded every facility for reading up the histories, philosophies and religious systems of the native races, together with all such side knowledge as manners and customs and Indian geography, ancient and modern. If some such method were adopted, with the distinct understanding that the new missionary should continue and extend such studies after his arrival in India, we believe that Bazaar-books after the type of the one before us would no

more be thought of. We fear that our Societies are in far too great haste to get men to preach in the vernaculars, and that they have proportionately far too little regard to that mental furnishing, by which alone such work as theirs can be done efficiently. However well adapted a man may be for a pastorate in his native land, if his one business in India is to preach to the natives, he has to begin life over again. It matters not what may be his age or his literary attainments; the A. B. C. of what is to be in future his language, the A. B. C. of social and domestic life, the A. B. C., in short, of every thing and of every custom around him, he must begin. Now we regard such books as that now before us as presenting to the new missionary a temptation as injudicious as it is unkind. We say this because in the attempt to lay down a sort of royal road to efficiency, those who are responsible for this book are furnishing a temptation to idleness and laziness which the climate and the customs of the country will only too speedily occasion. The fact is, there is no royal road in mission work; personal acquaintance with the native literature, ancient and modern, Muhammadan and Hindu, under the essential guidance of common sense and an earnest Christian spirit, are absolutely indispensable if a man is ever to become an efficient missionary. If any say that to wade through all the literatures of these peoples would occupy more than a lifetime, we reply that, while we entirely agree with the statement, this is no reason why a man should not master as much as he can. If any missionary consider that the time has come when he may safely discontinue the study of the native books, we think that his work as a missionary is well-nigh done. The idioms of the languages are so numerous and so different from anything that we are accustomed to in the ancient and modern languages of Europe, that we need to keep up a constant acquaintance with the books and translations prepared by natives, *i.e.* non-Christian authors: while the histories of the *deotas*, the theories of the religions and philosophical systems of the multitudinous sects, present so vast a field of study that no human memory can without constant reading and reference be safe from misquoting. And it is palpable that, unless we meet the people *on their own ground*, there must be a radical deficiency in the quality of our preaching. If we are not able to give them 'chapter and verse' just as if we were quoting our own Scriptures, our vague allusions to their many books must be devoid of all

conviction; while our ignorance of their books will often expose us to the derision of intelligent men. The same statements apply to the system of the Muhammadans: vague allusions to things contained in the Quran must be in a sense dishonest as well as powerless, unless we have read them with our own eyes, and can on this account vouch for their existence there. The missionary should regard his life as one of preaching and study combined. He should aim at being not merely a setter-up of what is to the people a new system; but also an iconoclast of their present errors. This he can never become, excepting by hard, personal, continued plodding.

We entirely agree that there is great need of a missionary literature for the special use of junior missionaries and native preachers: but it may be gravely doubted whether this book is a type of the class we really need for such persons—it is misleading, and ought therefore to be put out of their sight. As for those who no longer consider themselves 'junior' missionaries, they are greatly to be commiserated if their knowledge of native literature and of the people is such that they accept with docility such a book as this. But while we plead that each missionary should for himself read the native books and elaborate his own method for the Bazaar, we do not mean that he should altogether discard the reasonable helps which thoughtful and learned men have provided. Such are some of the works of Coleridge, Jones, and Ward; Small, Müllens and Max Müller, with many others. It is to the *abuse* of such helps, and not to the judicious use of them, that we raise objection.

We take great exception to the way in which Sanskrit quotations are introduced in this book. In addition to the fact that the person using the book has no guarantee whatever that the passages are accurately translated, the temptation to idleness will be very greatly enhanced. We are inclined to the opinion that every man who preaches much to Hindus, should know enough of Sanskrit to enable him to quote intelligently the original books. This is, in fact, just as important (neither more so nor less) as that the missionary to the Jews should be able to quote the Old Testament Scriptures in the Hebrew tongue. The Jew has more respect for a man who can speak to him in Hebrew, and who can, at any rate, quote the Hebrew Scriptures with facility and point; he has more sympathy with teaching which comes to him through that channel: besides all which, he feels more the

force of the Scriptures in the language through which his theology has come to him than through a vernacular; it is to him the language of all the names he honours, and the tongue in which his Creator spoke to the Patriarchs and to Adam. It is exactly the same with the Hindu. No Hindu who knows Sanskrit cares to see any religion in any other garb. The work is hard. Who ever thought that missionary work, thoroughly done, could be easy? But we might learn much from Bishop Leighton's apothegm:—"He that aims high shoots the higher for it, though he shoot not so high as he aims."

But yet another word on this feature of the work before us. There is the usual qualm in the preface about the danger of increasing too much the bulk of the work: and yet what a large amount of valuable space is simply wasted. For example, under each instance of the 'literal translation' of passages from native books there is given what is called the 'general meaning' of the passage. Now we are unable to find a single instance in the book in which the 'general meaning' throws the faintest degree of light upon the passage, so that the whole of the space occupied by such sentences is sheer waste. We give but one example of what is of constant recurrence. On pp. 46—47 the following morsel occurs:—

"Literal Translation.

"I am a possessor of sin: I am one who does sin; I am
"a sinful soul; I was born with sin; Oh God! who art gracious
"to those seeking refuge, save me by grace."

The authors are obviously anxious that we should not mistake the meaning of this passage: they therefore give us the

"General Meaning.

"Alas! I am a sinner: all my actions are sinful: my soul is
"filled with sin: I was born in sin. Oh Lord! Oh God!
"most merciful to those, who seek refuge in Thee! Save me by
"thy grace."

We are at a loss to discover either the necessity or the advantage of this explanation. And yet this book is prepared and given to the missionaries of India in A.D. 1869 by the Publishing Committee of a Missionary Society, and has the names of two Doctors on its titlepage!!

There is very little in the missionary's work that has a tendency to nourish and expand the intellectual powers. He has to meet with the same difficulties and objections every day, and sometimes in his addresses of half an hour he is compelled to go over the same ground several times. There is quite

enough in this to check and cramp the growth of mind. But our authors would cramp the minds of their brethren still more by not allowing them to think at all.

We are very much inclined to doubt the propriety and the justice of the practice, as on p. 24 of this work, of charging the Hindus with acknowledging 330,000,000 gods. They are Pantheists; and everything, animate or inanimate, is liable to some sort of deification. But surely to charge them with having so many separate and distinct objects of that affection which is due only to the Creator, must strike every intelligent man among them as an instance of either ignorance or injustice on the part of the missionary. We have repeatedly heard intelligent Hindus resist the imputation with scorn. We need, if we are to do justice to the people, to exercise greater discrimination as to the mental character of the various classes who listen to us. If our hearers be really intelligent men, they are either Theists or Pantheists: none but the very lowest vulgar among them can justly be treated as idolaters in the common acceptation of the term. We have no desire either to vindicate the errors of the people or to show that their faith and practices are immaculate; undoubtedly they "worship and serve the creature more than the Creator, who is blessed for evermore." But we hold that to deal with our fellow-men in such an absurdly irrational way as this book teaches, is neither wise, nor kind, nor just.

Scenes from the Ramayan, etc. By Ralph T. H. Griffith, M.A., Principal of the Benares College. Second Edition. London: Trubner & Co. Benares: E. J. Lazarus & Co. 1870.

WE have to congratulate Mr. Griffith on the publication of a second edition of the *Scenes from the Ramayan*, which originally appeared only two years ago. Success like this speaks more for the sterling merits of the work than any further praise that we could bestow upon it. Mr. Griffith informs us that a few slight alterations, have been made in this edition, and some eleven new poems have been added, eight of which are further contributions towards that complete metrical translation of the *Ramayana*, which the author, we see, has now in hand.

One of the best pieces in this little collection is, to our mind, "The Triumph of Love,"—a title which seems to have been originally suggested in a notice of Mr. Griffith's *Idylls*

from the *Sanscrit* which appeared in vol. xlii of this *Review*. Sita's faithful and heroic character is one of the noblest conceptions of the old Hindu poets, and it is not too much to say that it does not suffer in the hands of the present able and poetic translator. It is not surprising indeed that Western nations find more that is *en rapport* with their own thoughts and feelings in the works of these old Aryan poets than in the flimsy productions of their modern descendants. Sita is almost a European heroine; there are points in her history of course sufficiently touching and pathetic to excite human interest and sympathy anywhere; but somehow, as we Englishmen read the story at the present day, it is not of the *Indian* princess that we think; the bright and happy associations that cluster round our soul speak to us rather of our own true and noble-minded country-women.

As a specimen of the extreme pathos which Mr. Griffith has sometimes at his command, and which probably helps much more to convey the true impression of the original than a more literal translation, we shall select one of the latest additions to this volume, which pictures the interview of Sita with Rama after the capture of Lanka, and which Mr. Griffith has—somewhat unhappily, we think,—entitled “Sita Disgraced.”

“With her sweet eyelids wet with tears of shame,
“Unveiled before so many, Sita came
“And met her long-lost husband face to face.”

But Rama's love is checked by the suspicion that his honour has been tampered with. He regards her with sternness and in silence; he has

“No word for her who stood before her king
“In shame and anguish like a guilty thing.

* * * *

“Once, only once, she lifted up her eye,
“Once called upon him with a bitter cry.
“Then from rude eyes the tears began to flow,
“And warriors melted at the lady's woe.

* * * *

“But Sita cast her causeless shame away,
“And her own virtue was her strength and stay.
“Conscious of truth that slandering tongues defied,
“Her sobs she checked, her weeping eyes she dried:
“And struggling still with anger and surprise,
“Looked on her husband with unflinching eyes.”

Then Rama speaks, and explaining “the shameful doubt” that possessed him and cast out all his former love—

"No more thy beauty charms me. 'Tis a light
 "Shed by a torch that pains the injured sight."—

he banishes her from his hearth, and gives her leave to wander where she will. Sita replies softly as follows :—

"Hast thou the heart, O monarch, to dismiss
 "A high-born lady with a speech like this ?
 "To banish thus the daughter of a king,
 "Like some light damsel trained to dance and sing ?
 "By all the merit of my life I swear
 "I am not what thy hasty words declare.
 "Doubt others' faith, but cast all doubt aside
 "Of one whose truth a life of love has tried.
 "Round my weak form his arms the Giant threw,
 "But all the blame to Fate and him is due.
 "What could I do ?—a woman and alone ?
 "My heart was mine, and that was still thine own.
 "'Gainst this and honour have I wrought no sin :
 "Pure is my body as my soul within,
 "Or may the Gods my name and fame destroy,
 "And bar my spirit from eternal joy."

The conclusion of the episode is too well known to need repetition here.

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1. *The Analytical History of India, from the earliest times to the abolition of the Honourable East India Company in 1858.* By Robert Sewell, Madras Civil Service. London : W. H. Allen & Co. 1870.
 2. *Geography of India ; comprising an account of British India, and the various States enclosed or adjoining.* For the use of schools and students. London : W. H. Allen & Co. 1870.

IF these books contribute in any way to a better knowledge of England's greatest dependency in the East, they will not have been compiled in vain. It is, indeed, a satisfactory feature of the time to find that there is such a demand for books of this kind on Indian subjects as to make it worth the publishers' while to encourage their compilation.

Mr. Sewell's analysis of Indian History looks a useful work, and we have little doubt that the author's object will be attained, and that it will supply a want which is undoubtedly felt by many "for a condensed outline in one small volume, which should serve at once to recall the memory and guide the eye." The real merits of such a book, however, can only be tested by practical use, either in the class-room or the study. Mr. Sewell no doubt has earned the gratitude of those who under-

take to 'prepare young gentlemen for the Indian Services;' but for the more advanced class of students, we fear that the want of a good alphabetical index will prevent the book from being as useful as it otherwise might be.

To look for strict accuracy in any geography of British India which is based on Thornton's *Gazetteer* would of course be a vain expectation, but we certainly are surprised to find a book published "for the use of schools and students" in the year of grace 1870 so grossly incorrect as the little handbook of 250 pages which has just been issued by Messrs. Allen & Co. In a note prefixed to the preface, the editor humourously requests that notice of any errors or omissions may be communicated to him; but if any one has the time to spare for such a task, he will probably find he has simply to re-write the whole. The Lower Provinces of Bengal, for instance, are described as including an area of 176,813 square miles, with a population exceeding *twenty* millions, and as subject to the direct control of a Lieutenant-Governor and Council; the revenue collected in 1867-8 amounted to £3,721,062; the ports are Calcutta, Chittagong, Balasore and Cuttack; there are good roads, and telegraphic communication is complete. The native states *within* the district are Sikkim, Munipore, Hill Tippera, and the group called the Cuttack Mehals. Chôta Nagpore is said to be a 'regulation' province, the meaning of which term, however, does not seem to be properly understood. Calcutta is called the chief and *residential* city (whatever that may mean) not only of Bengal but of British India. Its climate is "peculiar," the early morning in December being particularly "hot and disagreeable." Rajmahal is on the main line of the East India Railway. Monghyr is a military station. Sylhet is also a military station. In the Sunderbunds whole islands are sometimes swept away during a gale. Behar is in the district of Gya. Near Patna is Bankipur, the residence of the Government Opium Agent.

But why multiply instances of gross inaccuracy and carelessness? The volume teems with them from beginning to end, and we should imagine that the compiler never set foot in the country which he has attempted to describe.

We must also protest against the system or rather the want of system in the spelling of native names in these two books. Mr. Sewell appends to his analysis a geographical index to the places mentioned in the text, which like the geography is said to be based on Thornton's *Gazetteer*. But Mr.

Sewell, while differing in many instances from Thornton's mode of spelling, would seem to do so from no consistent principles, but rather from a wayward spirit of contrariness. Thus, if Thornton writes *Jamoo*, Mr. Sewell writes *Jummoo*; while, because Thornton writes *Muttra*, Mr. Sewell has *Mattra*.

The spelling of the *Geography* is a system of its own. It "has been rendered as simple as possible. Unnecessary letters have been suppressed." "Both *h* and *r* are left out where the pronunciation is not affected," and (we may add) in very many cases where it is. Thus the *Bhâts* or wandering minstrels of India are written in a manner which is apt to confound them with a very different zoological family. Gazipur (sic) is famous for the manufacture of *atta* of roses—which, however, is not a species of flour, (as some might perhaps be inclined to suppose) but an essential oil distilled from the *leaves* of the roses. Why depart from the time-honoured '*Otto*,' to introduce a new word which is at once novel and equally incorrect?

This question of spelling is not the least important among the many difficulties which beset those who are now engaged in preparing the various *Gazetteers* of the Indian empire. Upon them it depends in a very great measure whether all minor differences shall give place to one recognized system, or whether the result will only end in adding one more to the multifarious systems which now perplex and puzzle the Indian student. A system, to be popular, must not be too pedantic, neither must it set scholarship altogether at defiance. There is no more to reason, for instance, for writing Ghazipur *Gazipur* than there is to write *Kalikata* for Calcutta. We have long despaired of attaining uniformity under any system; each name must be considered on its own merits, and where a name is spelt in a variety of ways, that must be selected which combines simplicity with accuracy, which is at once most likely to become current among men and is least distorted by popular corruption.

A Manual of Criminal Procedure for British India, for the Magistrate, the Justice of the Peace and the Police Officer.
By E. T. Atkinson, B.A., Officiating Judge of the Court of Small Causes and Subordinate Judge of Allahabad. Calcutta; Barham, Hill & Co. 1870.

TO the valuable works of Macpherson, Prinsep, Currie and O'Kinealy on the subject of Criminal Procedure in India, we have now to add a further contribution in the volume before

us. Mr. Atkinson has of course had to go over much of the same ground that has already been traversed by those who went before him ; but there is also much new matter in his book, while the important amendments of the law which have been carried out during the past year necessarily make the present work more complete than any of its predecessors.

The volume, which is a thick octavo of some 664 pages, contains the Code of Criminal Procedure *as amended by Act VIII of 1869*, with very full notes of cases decided up to date, besides the Acts other than this Code which relate to criminal procedure. A very interesting appendix discusses the history, the appointment and Office of Justice of the Peace, and treats of the European British subject and his amenability to the general and special laws of British India. Another appendix treats of the Police laws of the three Presidencies, and the principal orders and resolutions thereon. To the whole is prefixed a list of the cases cited, and a very complete analytical index. We have no hesitation in saying that this *Manual* is one of the most useful works that has lately issued from the press. We only regret that the bulk of the volume has apparently compelled the publishers to use a very inferior paper, which thus spoils the appearance of an exceedingly valuable book.

Perhaps the most useful as well as the most important portion of the work is the appendix which is drawn up for the use of the Justice of the Peace. To quote from the author's preface, "there is no branch of Indian law more obscure than that regarding the jurisdiction, ordinary and special, of Justices of the Peace, and the amenability of European British subjects to the local courts. It is hoped that this first attempt to eliminate and reduce to order the rules still in force on these subjects from the absolute and obscure mass of judicial records of the last seventy years, will prove useful to the Judge, the Bar, and the accused." Mr. Atkinson points out with some force the obscurity of the present law in regard to the jurisdiction of Justices of the Peace in the Mofussil, and he adds :—"Nothing has been done by the late amending Act (VIII of 1869) to relieve the courts from the embarrassment which the uncertain state of the law produces." We should be glad to see this appendix reprinted to a separate form.

The Madras Jurist (containing Judgments of the High Courts of Bengal, Madras, and Bombay, Latest Judgments of Her Majesty's Privy Council, Notes of cases, Leading Articles, Correspondence, etc. Published by C. Foster, Madras. Calcutta

Agents, Messrs. Thacker, Spink and Co.; Bombay Agents, Thacker Vining and Co.)

THE *Madras Jurist* has reached its fifth volume, and has deservedly secured a large circulation in the sister Presidency. It is published punctually at the beginning of each month, and embraces a wide range of legal subjects, both Indian and English. Its principal value of course consists in the reports of Madras High Court judgments, but all the more important Bengal and Bombay cases are also given. The leading articles are ably and carefully written, and furnish the younger legal practitioners and students with valuable *résumés* of the more important legal topics and principles, expressed in interesting and intelligible language. The "Legal Echoes from England" contain a readable summary of the latest events in home politics and legislation. By opening his columns to the discussion of legal points and difficulties, and answering the questions of correspondents, the editor has supplied a much felt *desideratum*, for which young judicial officers and pleaders ought to be, and no doubt are, duly grateful. The "short notes of English Cases" are specially compiled for the *Jurist*, and serve to keep the reader *au courant* with the decisions of the superior courts in England. The circular orders and letters of the Madras High Court are also given. We would call attention especially to a very useful and complete set of Criminal Procedure forms, issued by them last year, the adoption of which will save magisterial officers much time and trouble. Though not formally sanctioned by the Bengal and Bombay High Courts, they are, no doubt, equally applicable to those presidencies.

The *Jurist* is very neatly got up and printed, and the price is so moderate as to bring it within the reach of everybody interested in legal matters. We are sure that it only requires to be known in order to command the same success in Bengal that it has already deservedly attained in Madras and Bombay.

We have received too late for notice in the present number *A Treatise on Asiatic Cholera*, by C. Macnamara, Surgeon to the Calcutta Ophthalmic Hospital (London: John Churchill and Sons. 1870), which, however, we shall hope to review fully hereafter. We have also to acknowledge with thanks the receipt of the following publications:—

A Sketch of the Treatment of Cholera. By Mohendra Lall Sircar, M.D., Calcutta: Anglo-Sanscrit Press. London: Henry Turner & Co. 1870.

The Calcutta Journal of Medicine, for September and October 1869.

The Indian Annals of Medical Science. No. xxvi. 1870.

Report on Vaccination Proceedings throughout the Government of Bengal, with an Appendix, for the year ending 31st March 1869. By J. Murray, Esq. M.D., Inspector General of Hospitals, Indian Medical Department, Calcutta : Office of Superintendent of Government Printing. 1869.

Annual Statement of the Trade and Navigation of British India with Foreign countries and of the coasting trade between the several Presidencies, in the year ended 31st November 1868 ; together with miscellaneous statistics relating to the foreign trade of British India from various periods to 1867-8. Calcutta : Office of Superintendent Government Printing. 1869.

Progress Report of Forest Administration in Bengal for 1867-68. By H. Leeds, Esq., Conservator of Forests, Bengal. Calcutta : Public Works Department Press. 1870.

Report on the vegetation of the Andaman Islands. By Mr. S. Kurz, Curator of the Herbarium, Royal Botanic Gardens, Calcutta. Office of Superintendent of Government Printing. 1870.

The Proceedings and Transactions of the Bethune Society from November 10th 1859 to April 20th 1869. Calcutta : Printed at Bishop's College Press. 1870.

Not to be : A Story of the Day. By Paul Benison. In two volumes. London : Chapman and Hall. 1870.

VERNACULAR LITERATURE.

Lives of the Bengali Poets. With Selections from their Works, and an Introductory brief History of Bengali Poetry. Part I. By Hari Mohan Mukhopádhyaý. Calcutta : New Sanskrit Press. 1869.

IN the introduction of this very interesting book, the writer gives a cursory sketch of the history of Bengali poetry. The first verse-writer in the Bengali language was Bidyápati, who wrote poetry before the birth of Chaitanya and therefore flourished about four hundred years ago. Next to him was Chandidás. From the specimens which our author produces of the extant verses of these two earliest Bengali poets, it appears that the Bengali language was then very different from what it is now, there being a large infusion of the Hindi element. Since the advent of Chaitanya, Bengali poetry began to be cultivated with greater zeal than before. Jiva

Gosvámi may be regarded as the first considerable poet, and his work, called *Karacháyi*, as the earliest Bengali poem extant. In the body of his work our author sketches the lives of the following poets,—Krittivás, Kavikankan, Kásirám Dás, Ram Prasád Sen, Bhárat Chandra Ráy, Madan Mohan Tarká-lankar, and Isvar Chandra Gupta, and gives a few specimens of the poetical compositions of each. We shall briefly mention the leading facts in the life of each of the above-named poets.

Little or nothing is known of the life of Krittivás, the great translator of the *Ramáyana*. In his voluminous work he makes no further allusions to himself than that he was a Bráhmaṇ; that he was born at Fulia, which is supposed to be a village in the vicinity of Santipur; and that he was the grandson of Murári the necromancer. At what time he lived it is impossible to determine. Our author is of the opinion that Krittivás was ignorant of Sanskrit, and that he made his translations from the recitations of *kathaks* or rhapsodists; and this opinion is professedly grounded on a couplet of the poet himself in the *Aranya Kánda* of his *Ramáyana* in which he says that he “composed his song on hearing the *Purána*.” But we do not think that this opinion is tenable. In the first place it would be scarcely possible for any man to translate such a long poem as the *Ramáyana* from memory. In the second place the performance itself shows from the manner of its execution, from its style, the number of Sanskrit words it contains, and from his acquaintance with the images of Sanskrit poets, that the translator was not unacquainted with that language. And thirdly, Krittivás often calls himself ‘Pundit,’—a designation to which he could possibly have no claim if he were ignorant of Sanskrit. As to the couplet in the *Aranya Kánda* to which reference has been made, it does not necessarily mean that he translated the great epic from his recollections of the recitations of *kathaks*, but it may mean that he was induced to translate it into the vernacular from observing the effects which those recitations produced on the people. It is also true that there is no little difference between the translation and the original poem; but it is to be considered that Krittivás never pretended that his translation was an exact and faithful one, and as he himself was endowed with some poetical genius, he deemed it proper, with a view to consult the public taste, to make some retrenchments from, and some additions to, the original work.

The next poet on the list is Mukund Ram Chakrabartti *alias* Kavikankan, the author of *Chandi*. Unlike Krittivás, he has in his poem given us a great many particulars regarding himself. He was born in the village of Damunyá in the district of Burdwan, which he was obliged to leave on account of the oppression of Maud Sherif, Governor of Burdwan. Accompanied by his family, he crossed the river Gorai and went to the village of Tentiya and fording the Dalkesor, he neared the hill Bátan, and thence retracing his steps found himself at Kunchut-kalesvar in the district of Burdwan. Fatigued with the journey and distressed with the cries of the little ones for want of food, he fell asleep under a tree, when the goddess Chandi appeared to him and bade him compose poetry. On waking he took up pen and ink and a leaf, and thus commenced his poetical career. Afterwards he went to Ardá in the district of Bancoorah, the Raja of which place, Raghuram Páladhi, patronized him. He was first appointed tutor to the son of the Raja, and was afterwards installed court-poet or laureate. It was here that Kavikankan wrote the celebrated *Chandi*, which is unquestionably the first, the greatest and the most original poem in the Bengali language. Kavikankan himself says that he finished his poem in Sakábda 1466; but our author justly remarks that this date ill agrees with either the subadarship of Man Sing or the governorship of Maud Sherif: it is supposed on other grounds that he flourished about 270 years ago. Kavikankan had a brother of the name of Kaviranjan, who is the author of the short story entitled *Dátákarna*, so popular with Bengali boys.

The next poet who is introduced to us in the book under review is Kásirám Dás, the translator of the *Mahábhárata*. He tells us himself that he was by caste a Káyastha and was born in the village of Siddhigrám in Indráni. The writer of the book before us is of opinion that Indráni was in the Hooghly district, and, to confirm it, quotes four lines from Kavikankan who mentions the place. But those lines prove that Indráni was not in the Hooghly, but in the Burdwan, district, as it is said to have been near Mandalghât. When Kásirám flourished, we do not exactly know: he lived probably two hundred years ago. There is a current tradition to the effect that Kásirám did not himself complete the translation of the *Mahábhárata*. It is said that he died after translating the *Adiparva*, the *Sabháparva*, the *Bonparva*, and a part of the *Birataparva*; and that the rest was done by his son-in-

law of whom we know nothing. But we agree with our author in thinking that the statement is highly improbable.

Rám Prasád Sen was a native of Kumarahatta near Hálishahr, about twenty miles north of Calcutta on the left bank of the Hooghly. He was of the Vaidya (physician) caste; and as he was in straitened circumstances, he took service as an accountant under a merchant. As he had naturally a poetical turn of view, he used to fill the spare leaves of the account-books with effusions in verse. This attracted the notice of his immediate superior who reported the circumstance to their common master, representing it to be a grave offence. The merchant greatly admired the poetical effusions, and instead of rebuking him, settled on him a pension of thirty rupees a month, that he might devote himself to the cultivation of poetry. Thus commenced the poetical career of Rám Prasád. He composed a considerable number of hymns and songs which were greatly admired at the time, and which, under the name of *Ramprasádi*, are still sung with infinite zeal. He was afterwards patronized by Raja Krishna Chandra of Nuddea, who courted his society on account of his fine voice and exquisite songs, and who conferred on him the title of *Kaviranján*, or the "Delight of poets." He was the author of a poem called the *Bidya Sundar*, which formed the basis of Bhárat Chandra's more celebrated work. Ram Prasád was drowned in the Hooghly, probably in a fit of intoxication. He is said to have been born about 150 years ago.

Bharat Chándra Ráy, the prince of Bengali poets, was born in Sakabdá 1634, in the village of Pánduá in Parganah Bhursut in the district of Burdwan. By the way, Burdwan seems to have given birth to most of the great men of Bengal. Kavikankan Kásiram, and Bhárat Chandra—were all natives of Burdwan, and so was the great Rája Rám Mohun Ráy, for though Radhanagar is *now* included in the Hooghly district, it has from ancient times been regarded as part of the Burdwan district. But to proceed with the life of Bhárat Chandra. As his father, who was a respectable zemindar, was reduced to poverty owing to a disagreement with the Raja of Burdwan, Bhárat left his paternal abode and went to his uncle's at Naopara in Parganah Mandalghát, where at the age of fourteen he mastered the Sanskrit grammar and dictionary. Soon after this he contracted an imprudent marriage, owing to which he incurred the displeasure of all his relations. Disgusted with the treatment he received, he again

left his paternal roof, and found shelter in the house of Ram Chandra Munshi in the village of Devánandapur near Bansberiah in the district of Hooghly, where he began to study the Persian language, and where he also composed his first Bengali poem on *Satyanáráyana*. When he was 20 years old, he again returned to his relatives, who persuaded him to go to Burdwan as mukhtar, and where, in consequence of some litigation, he was put in prison. Through the connivance of the jailor, Bhárat Chandra was allowed to escape from prison, and he fled to Puri in Orissa, where he studied the *Sri Bhágavat* and other works on Vaishnava theology, and where he also assumed the garb of a *Vairági*. He next turned up at Chandernagore, where he fell in with Raja Krishna Chandra of Nuddea, the Mæcenas of Bengali literature. Under his auspices, Bhárat Chandra courted the Muses, and successively wrote the *Annadá Mangal*, the *Bidyá Sundar*, and other works, which have made him immortal. The Raja conferred on him the title of *Gunákar*, or the "Mine of Virtue." But he received from his patron something more substantial than an empty title in an estate in the village of Mulájer, opposite to Chandernagore, where he lived in ease and dignity, and where he died in Sakáblá 1682, at the early age of forty-eight.

We shall pass over the life of Madan Mohan Tarkálankar, who cannot be said to have been a great poet, and come to the last on the list, the late Isvar Chandra Gupta. He was born at Káchráparah, twenty-eight miles to the north of Calcutta, on the left bank of the Hooghly, in the year 1216 (Bengal era). He discovered poetical tendencies when six years old, at which age he is said to have uttered the following couplet:—

রাত্রে মশা দিনে যাছি ।

এই নিয়ে কল্কাতায় আছি ॥

Isvar Chandra received no education properly speaking, but the natural force of his genius made him a great writer. In the year 1237 (B.E.) he started the *Prabhákar* as a weekly newspaper, which, in six years, became tri-weekly, and soon after a daily journal. The monthly *Prabhákar* was filled with literary matter, chiefly poetry. Besides the *Prabhákar*, he edited at times two weekly newspapers—the *Sádhuranjan* and the *Páshanda-pidan*, the latter of which generally contained indecent and scurrilous matter, and in which he chiefly abused his contemporary, the editor of the *Bhaskar* and *Rasarāja*, Gouri Sankar Bhattacharjya alias *Gudgude Bhatcháj*, so called from

his short stature. Isvar Chandra Gupta died in the 49th year of his age. His chief works are—*Prabodh-Prabhákar*, *Hita-Prabhákar*, *Bodhendu-bikás*, and the *Life of Bhárat Chandra Ráy* in prose.

We are much obliged to Babu Hari Mohan Mukhopadhyáy for giving us in the compass of a small volume so much interesting information, and especially for reducing to a permanent form some of the many floating traditions regarding the early poets of Bengal.

Rasinára : A Historical Novel. By Kálí Krishna Lahirí. Calcutta : "Bengal Weekly Report" Press. B.E. 1276.

RASINARA, or Raushenara, is the name of the daughter of Aurangzeb, who was captured by the Mahratta chief, Sivaji, on her way from Delhi to Madura in south India, where her father was in command of the Mogul troops. Upon this incident our author has constructed a novel which has considerable merit. The young lady, who had surpassing beauty and the highest accomplishments, was detained in the fortress of Ráyagada. Sivaji had captured her for political motives only, but, smitten by her charms, he fell in love with her. Before they could be united together in the bonds of wedlock, however, the fort was taken by the Mogul general, Afzal Khan, through the treachery of Mankaji, one of Sivaji's generals, and Raushenara was restored to her father. The author has not shown much skill in the *dénouement* of the story. Sivaji follows Raushenara to Delhi, and the princess is so deeply in love with the Mahratta King that she is ready to escape with him from the imperial palace. But when every preparation for flight has been made, at the eleventh hour she refuses to elope with Sivaji on the sudden pretext that her father would be displeased. The character of Sivaji, however, is well drawn. Brave, patriotic, generous, he was the soul of honour; while his intercourse with a sage residing in a temple in the adjoining forest imparts to his character a sort of solemn and mystic grandeur. In the character of Mánkaji are illustrated fierce personal animosity mingled with the sublimest patriotism, and the loftiest religious pride. Raushenara, as a character, is not well-sustained. At first she is loveable and charming; but towards the end of the story she sinks into something like a prude. In spite of these and other faults, it must be admitted that Babu Kali Krishna Lahirí has written an interesting tale.

Bhrántibilás. A Tale from Shakespeare's "Comedy of Errors." By Isvar Chandra Bidyáságar. Calcutta: Sanskrit Press, 1869.

SHAKESPEARE'S celebrated *Comedy of Errors* is here reproduced in Bengali prose. As the learned Pundit has very wisely substituted Indian names of persons and places for the foreign names in the comedy, the tale reads like an original story. It is almost superfluous to remark that the composition is excellent and that the story is well told, as it is well known that Pundit Isvar Chandra Bidyáságar has a graceful and elegant pen. We have therefore no hesitation in saying that the performance before us is a pleasing contribution to light literature. It may, however, be permitted us to remark that vernacular literature expects more from the learned Pundit than what he has already contributed to its stores. He has hardly yet done justice to himself. He has written nothing worthy of his great talents and vast erudition. The composition of school-books and the translation of ordinary English and Sanskrit treatises might be well left to inferior men. The *Banabás* of Sita, the *Betál Panchabinsati*, and the present performance, are graceful contributions to Bengali literature; but they are at best but elegant trifles. The country expects some more worthy monument of his learning and genius; and we sincerely trust that the learned Pundit instead of wasting his rare talents on such beautiful bagatelles as the tale before us, will direct them to the elaboration of a work which posterity will not willingly let die.

Kusum-Káminí. Part I. By Braja Nath Ráy. Calcutta: Jadu Gopál Chatterjea & Co's Press. Samvat 1925.

THIS is a love-tale in verse, extending over 206 pages, and yet we are told it is only the first part of the poem. The book celebrates the loves of Kusum Kumar, son of the king of Kashmir, and Ananga Mohiní, daughter of the Prime Minister of the king of Avanti. The writer has considerable facility in making verses, and some of his verses have poetical merit; but it is a great pity that he has made the poem such a prolix and tedious affair. We do not wish, however, to say anything severe of our poet, as in his preface he disarms criticism by declaring his penitence for "having intruded into the garden of poesy" at all. For all that, the writer has in him the making of a good poet.

Kavitá-Kusumānjali. For Children. By Krishna Kisor Bandyopadhyáy. Calcutta: Hitaishi Press. B.E. 1276.

THIS Poetical Reader, by the first Pundit of the Calcutta Government Patshálá, has greater merit than most publications of the kind. The versification is correct and often elegant. Some of the subjects treated in the book are as follows:—“The Dawn;” “The Rising Sun;” “The Setting Sun;” “The Penitent Sinner;” “Pride;” “Friendship;” “The Sanscrit language;” “Money, the root of all evil;” “The Kohinoor;” “Gándhári’s Lament on the field of Kurukshetra.”

Nárijáti-bishayak Prastáb. A Discourse on Woman. By Káli Prasanna Ghose. Calcutta: Kávya Prakás Press. Samvat 1926.

WE have read this book with pleasure. The author is an intelligent and eloquent advocate of the rights of woman in India. The book is divided into four chapters. The first chapter treats of the nature of woman; the second of female education—its necessity, its nature, the pernicious consequences of its want, its present state; the third, of the liberty of women; and the fourth, of her social position. The writer, who is greatly in advance of the majority of his countrymen, and who has read all that has been written about woman in the English language, very earnestly advocates the education of women in Bengal, their emancipation from the prison-house of the zenana, and their introduction into society. As the treatise contains nothing original or new to English readers, it is unnecessary to give extracts; but it is calculated, if we mistake not, to do a great deal of good to those native readers who are unacquainted with the English language. The style is excellent.

Aschárya Svapna-darsan. Published by the Harinábhi Bráhma Samáj. Calcutta: G. P. Roy and Co. 1869.

THIS is a “wonderful dream” the substance of which, we are told, was actually dreamt by a member of the Harinábhi Bráhma Samáj, but the particulars of which need not be recited here. It is sufficient to remark that moral and religious instruction is conveyed by the vision. It is observed in the preface,—“If this book induces one soul to hate the world and to love God, the object in writing it will be accomplished.”

Joga-Laharí. By Krishna Chandra Dharmádhikári. Calcutta : New Bengal Press. Samvat 1926.

THIS is a tract of 27 pages on devotion as modified by the Yoga system of philosophy. We do not pretend to be initiated into the mysteries of that philosophy, but to our lay understanding it seems clear that a system of devotion, the principal part of which consists in intense and rapt contemplation of the nine pores of the human frame in general, and of the reproductive organs and the foetus in particular, cannot promote the interests of morality. We therefore raise our humble protest against the publication of such perilous stuff. We wonder that such a learned man as Krishna Chandra Dharmádhikári, now residing at Benares, should waste his time on such pernicious trifles ; and our wonder becomes greater when we find that the tract has been published under the auspices of a well-known benevolent gentleman of Calcutta, Babu Táarak Nath Prámánik.

Banga-Sundarí. By Bihári Lal Chakrabartti. Calcutta : New Bengal Press. Samvat 1926.

WOMAN is viewed and described in this poem of nine cantoes in her seven-fold aspect, *viz.*, as the dependent one, the merciful one, the distressed one, the befriending one, the mourning one, the beloved one, and the wretched one. There is considerable merit in the performance ; the versification is correct on the whole, and sometimes melodious ; the images are chaste and elegant, and the sentiments just. Some of the passages are also tender and pathetic.

Nisargasandarsan. By Bihári Lal Chakrabartti. Calcutta : New Bengal Press. Samvat 1926.

THIS is another poetical work from the same hand, and similar remarks are applicable to it. As the writer has some facility in composing verses, it is a pity he wastes his powers on small poetical pamphlets. It would be better, both for himself and the public, if he were to concentrate his energies on a poem of some size. We would also advise him not to be in haste to publish his effusions. His verses would greatly improve in quality, if he devoted more time to revising and polishing them.

Kavitákaumudi. Part I. By Haris Chandra Mitra. Dacca : Giris Press, 1870.

HERE is the *Moonlight of poetry* radiating upon us from the poetical city of Dacca. The poet sings, in verses of varied melody, of the "infinite skill of God;" of "the royal sepulchre;" of "man-god;" of the "sinner's self-reproach;" of the "wailing of a blind man;" of the "*chátak* bird;" of "a miser;" of "covetousness," &c. &c.

Sitá-Nirvásaná Kávya. By Jádavananda Ráy. Dacca : Giris Press, 1870.

THE Borgángá, like the fountain Aganippe at the foot of Mount Helicon, must have the rare quality of inspiring those who drink of its waters. Here is another poem—and an epic too in four books—from Dacca, the favourite haunt of the Bengali Muses. The subject—the exile of Sita—is susceptible of the finest poetry. But in the verses before us we miss its very semblance. The prose work on the same subject by Pundit Ísvar Chandra Bidyáságar is infinitely more poetical.

Bose's Works. Part I. *Swarga Bhrashta.* Hooghly : Bodhodaya Press.

THE *Swarga Bhrashta* or *Paradise Lost* is an imitation in the Bengali language, by Mr. Thomas Mohendra Lal Bose, of Milton's magnificent poem. It consists of seven books; the first is entitled "The Garden of Eden;" the second, "Hell and its King;" the third, "The Council of the Hell-king and the Asuras;" the fourth, "The Hell-king's entrance into Eden and the temptation of the Woman;" the fifth, "Joy in Hell and Proposal of the Asuras to set up an Asura-kingdom on the Earth;" the sixth, "Man's Fall;" and the seventh book, which has no heading, treats of the expulsion of our First Parents from the Garden of Eden. To say that Mr. Bose has succeeded in producing in Bengali a poem similar to Milton's immortal epic, would be to say that Mr. Bose has genius equal to that of Milton; and Mr. Bose himself, we are sure, would be the last person in the world to court the comparison. But comparison with the *Paradise Lost* apart, the performance before us is not destitute of merit. It must be evident to any one who reads the book through, that the writer has no mean powers of thought and expression; nor is the ingenuity shown in adapting

Milton's machinery to the mythology of India unworthy of praise. There also runs through the poem a sort of wild sublimity which, though it naturally arises from the subject, is in part due to the poet's powers. We could wish, however, that Mr. Bose had not imitated Mr. M. M. S. Datta in taking to blank verse. Our objection to blank verse is the same as Professor Conington's—so few of us can write it. With all deference to Messrs. Datta and Bose, we have not seen a dozen lines of Bengali blank verse which really deserve the name of poetry.

Devarāvinda; Or a Wonderful and Pathetic Tale, full of moral instructions. By Asvini Kumar Ghose of Sholkhádá, Zillah Jessore. Calcutta: New Sanskrit Press. Sakábdá 1791.

A WRITER who describes, on the title page, his own work as “a wonderful and pathetic tale”—by the way the word “wonderful” is always spelt by him with an *a* in place of *o*—and as “full of moral instructions,” must be a man of no ordinary capacity, modesty, and good taste; and the body of the work fulfils the expectations raised by the title-page. The book contains a truly “wonderful” story of the son of a king of Guzerat who knew “Bengali, Sanskrit, English, French, Greek Latin, Hebrew, German, Arabic, Persian, and other equally good languages.” We wish our author had written either in Hebrew or in Arabic, as in that case we should have escaped the infliction of perusing not only a silly story, but one written in a style unnatural and inflated.

Budo-Bakvesvarer Galpa. Part I. By Rasik Chudámani. Calcutta: J. G. Chatterjea & Co's Press. B.E. 1276.

THE *nom de guerre*—Rasik Chudámani, or the “Prince of Wits”—which the writer has assumed is a misnomer, except it be understood ironically; for there is no real humour in the performance and the witticisms which he perpetrates are as old as the days of Methuselah. He evidently aims at imitating the author of *Hutom-Penchár Naksa*, but it is a miserable failure. Vulgar jokes are cracked on every page in still more vulgar language. We understand the writer is the Pundit of a Government Training School; he has evidently very little to do, and the Inspector of the Division should see to it that this would-be Bengali Joe Miller does not jest away the important duties entrusted to him.

Sangita-Sára ; Or a Treatise on Hindu Music. By Kshetra Mohan Gosvámi. In two Parts. Calcutta : Stanhope Press. 1869.

PUNDIT Kshetra Mohan Gosvámi has written a most elaborate work on Hindu music. It is, moreover, not a treatise merely on ancient Hindu music ; it notices the changes it has undergone in modern times, and gives a scientific and practical exposition of Hindu music according to the approved practice of modern European writers on music. The book is accordingly divided into two parts, the theoretical and the practical. Not being musicians ourselves, we are unable to judge of the accuracy of the forms he has introduced ; but he deserves infinite praise for being the first Bengali gentleman who has treated of Hindu music in a scientific method. The author both in his researches and in the publication of his work was greatly indebted to Babu Jotendra Mohun Tagore, to whom he has naturally dedicated his splendid book.

Kapatatá-bishayak Prabandha. By Sarodá Mohan Dás. Dacca. Giris Press. 1869.

WE do not seem to have yet done with Dacca. But this time it is not poetry that we are favoured with. It is a lecture on Hypocrisy delivered at the Sylhet Young Men's Literary Society. The writer has considerable rough humour and eloquence about him, which he directs chiefly against those Bráhmós who make loud pretensions of monotheism abroad and worship idols at home. Most of the books and pamphlets published at Dacca make honourable mention of the name of Babu Haris Chandra Mitra, a resident of that city, who seems to have made it his vocation to help every literary aspirant not only with advice but with pecuniary contributions. The Babu deserves great praise for his self-denying labours in the cause of vernacular literature.

Dharma-Samanvay. Part I. By Jay Gopal Basu, inhabitant of Sádipur in the zillah of Burdwan. Calcutta : Kávyá Prakása Press. Sakabdá 1791.

THE object of this book is to show that all the religious systems in the world are agreed in all those essential matters which are connected with the worship of God and with morals. The writer shows considerable acquaintance with

the Hindu Shastras and the Christian Scriptures. He tries to show that the Bible contains nothing which is not to be found in either the Hindu Shástras or the Quran. As we do not wish in these brief notices to enter into any lengthy religious discussions, we content ourselves with merely stating our opinion that the writer has failed to maintain his position. He deserves praise, however, for the pains he has bestowed on the discussion of so interesting a subject.

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1. *Chakshudán*. A Farce. Calcutta: Stanhope Press, B. E. 1276.
 2. *Ubhaya-Sankat*. A Farce. Calcutta: Stanhope Press, B. E. 1276.

THESE two farces, which are evidently from the same pen, are of considerable merit. The wit displayed in them, if somewhat broad and boisterous, is genuine. The writer should try his hand at a comedy, as we believe he has in him the making of no mean comedian.

Proverbs of Europe and Asia. Translated into the Bengali language. Calcutta: Kávyá Prakás Press. 1869.

THE object of this treatise will be best learned from the following preface written by the Rev. J. Long:—"The following contains a free translation into Bengali by Babu Ranga Lal Banerjea of proverbs selected by me from the German, Italian, Spanish, Portuguese, Dutch, Danish, French, Bodagar, Malayalim, Tamul, Chinese, Panjábi, Mahratti, Hindi, Orissa, and Russian languages. The object is to introduce to the notice of the Bengali people the wit and wisdom of peasants and women in other parts of the world. The Russian proverbs, 200 in number, though last in the series, will not be found the least in their wit and keen sarcasm." If Mr. Long means to say that proverbs are manufactured by "peasants and women," he is mistaken. A proverb has been justly defined as the "wisdom of many conveyed by the wit of one." Mr. Long deserves great praise for his diligence in collecting so many proverbs from so many languages, and Babu Ranga Lal Banerjea for his elegant Bengali version of them.

THE
CALCUTTA REVIEW.

NUMBER XOLX.

JANUARY

1870.

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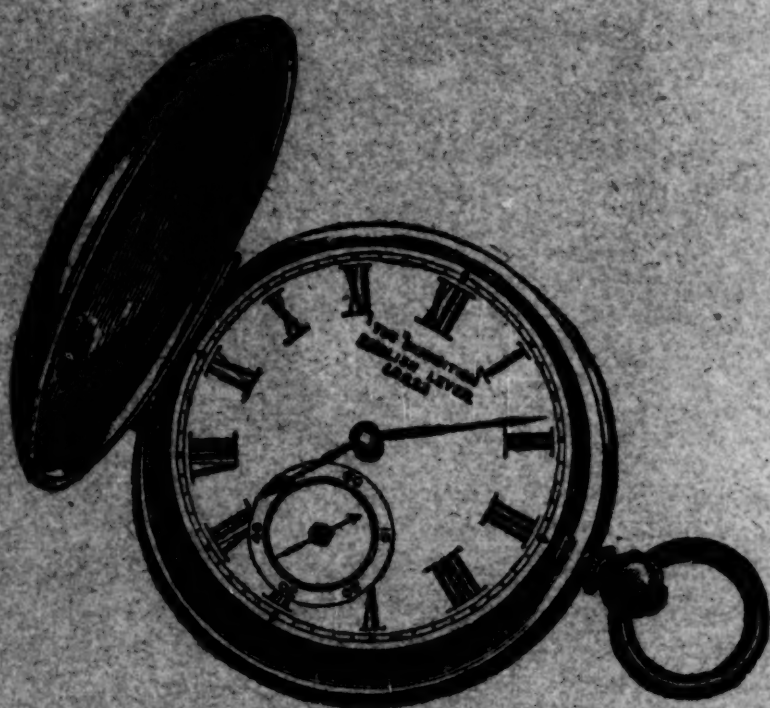
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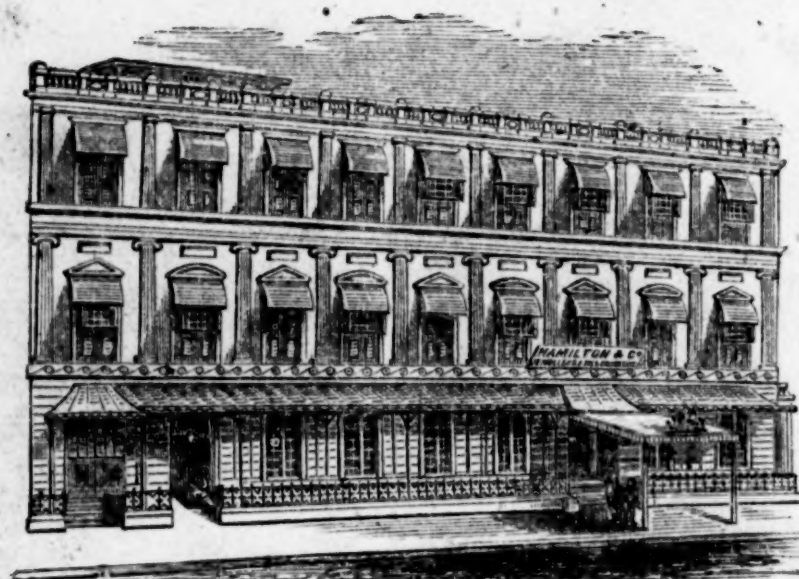
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